

# PRIX EDITIONS

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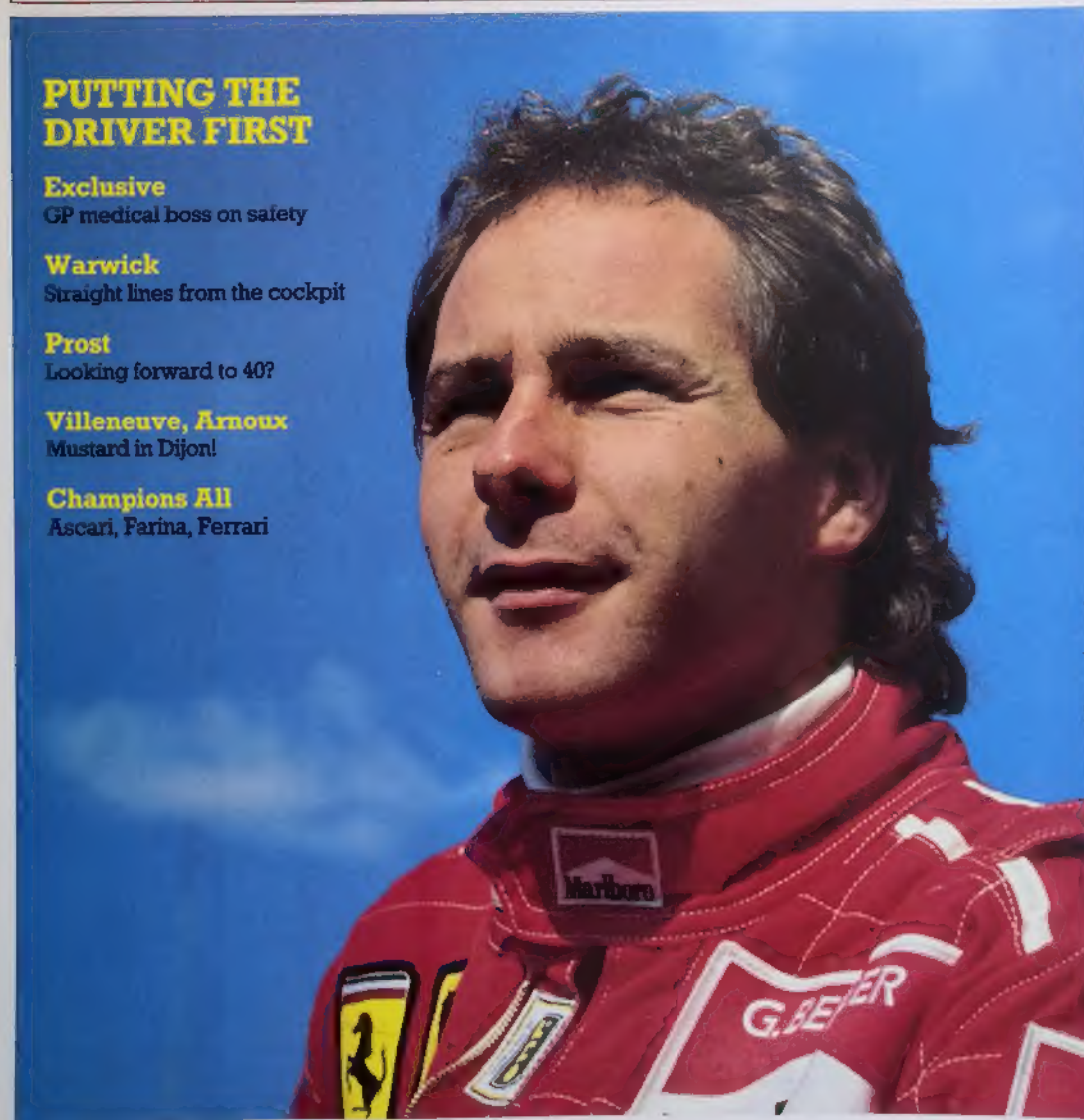
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# Benetton Formula: enjoying the new atmosphere

stands as genuine motor racing returned to Formula 1. Atmospheric engines are now the order of the day in Grand Prix racing: instead of turbos forcing unnatural amounts of air into the cylinders — as much as five atmospheres in some of the fiercer units seen in the past decade — there are now only 3.5-litre normally-aspirated engines from a worldwide variety of sources.

There was early disappointment for the Brazilian faithful when World Champion Ayrton Senna's McLaren tangled with the Ferrari of Gerhard Berger on the very first corner, ending the Austrian's race and effectively leaving Senna in limbo. No harm was done to the race, however: no fewer than seven times would the lead change hands, but when the dust settled the scarlet Ferrari of Nigel Mansell would head them all home — a fairytale start for the combative Englishman in a new team. Second was the McLaren of Alain Prost, and home spirits rose with the first-ever rostrum finish for local boy Mauricio Gugelmin in the March.

Firmly at the heart of the matter, however, was the man in fourth position. Driving the handsome Benetton Ford with its V8 engine, newcomer Johnny Herbert became the first man since the legendary Prost himself, ten seasons before, to score World Championship points in his first-ever Grand Prix.

It was a triumph for man and machine, and the harmony between them. Fitness, for the modern Grand Prix driver, is all. Skill, at this level, is almost taken as read, but with that skill must go the physical and mental toughness to endure a sixty-lap pounding in the cockpit. The way the body works inside a Grand Prix car is quite extraordinary, as recent in-car camera work has shown: racing suspension does not exactly put a premium on driver comfort, while the G-forces in Formula 1's most daunting corners — the fearsome Eau Rouge at Spa, for example — defy belief. To say nothing of the cockpit temperatures...

Through it all, a driver must be able to call on razor-sharp reflexes, precision in the placing of his car, accuracy in the judgement of braking points. A fraction of a second, in his peculiar place of work, can make or break his working day. Mind, eye and body must all work in perfect harmony.

What places the Grand Prix driver apart from other athletes, however, is the extra dimension brought by the machine in which he plies his trade. The same basic principles apply to his car as to himself: it must be a whole greater than the mere sum of its parts, all of which in the first instance are machined



RIO: HERBERT CELEBRATES HIS FIRST POINTS

to the finest tolerances from materials at the leading edge of modern technology. Component performance is crucial, for going Grand Prix racing is no overnight matter: why jeopardise the months and years of planning, preparation and construction with a faulty bearing or a suspect tube? At the heart of this extraordinary machine is its engine. Rory Byrne's elegantly efficient Benetton chassis is wedded to Ford's hard-working V8 power unit, whose rhythm in turn is maintained by the Mobil 1 lubricants on which Benetton rely to ensure maximum performance in the most testing extremes of stress and temperature. Rio, more than any other circuit on the calendar, makes killing demands on engine temperatures, but other tracks like Monaco require other characteristics: torque, the ability to spread the power over a wide band, pick-up out of the endless corners, but genuine punch on high-speed straights with consistent running at 11,000 revs and more. Now that turbos are a thing of the past, the engine specialist is looking for an output around 650 brake horsepower, with closer racing than we have seen for a decade in store, the spoils will go to the team whose engine finds the extra edge.

Ford have chosen the V8 path for

their new engine, convinced it will hold its own against the V10s and V12s preferred by other major manufacturers. The heat of battle in Rio underlined the Ford engine's reliability, but a similar challenge faced its driver. Johnny Herbert's prodigious gifts were never in doubt, but in Rio he proved he too could last the distance. Peter Collins had been unwavering in his faith in Britain's newest talent: the confidence was handsomely repaid in Brazil on March 26. Johnny Herbert may still be walking at a tortoise pace, but in a Benetton Ford cockpit he is one of the hares the F1 pack will be trying to hound this year.

Motor racing is a marriage of men and machines. The successful ones are the genuine working partnerships. Johnny Herbert, Benetton Formula, Ford — and Mobil 1: this is a team to take on the Grand Prix world.

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TWO NAMES, ONE COCKPIT: THIS ONE IS HERBERT

No fewer than forty drivers are themselves aspiring to a place on the 26-car grid for the first race of this new season. One of them is no normal aspirant, as far as Grand Prix racing goes: five months ago he was unable to walk unaided, today he joins the world's elite at the pinnacle of motor sport. In two hours' time, a British driver in a British car, he will have produced a performance to gladden the hearts of all who follow Formula 1 in its 16-race tour of the world.

Pre-qualifying sorted the men from the boys, first of all: just five of the eager newcomers could go into the 30-car competition for places on the grid itself, but the good news was that in this heart-stopping moment when the 26 qualifiers waited for the green light of season 1989, the grid had a refreshingly new look. New engines — V8s, V10s, V12s — new faces and a handful of all-new cars took their places in front of the familiar sun-drenched

DATELINE RIO DE JANEIRO, MARCH 26: A NEW BEGINNING  
FOR FORMULA 1 RACING, AS TURBOCHARGING IS  
OUTLAWED AND NORMALLY ASPIRATED ENGINES ARE  
ONCE MORE THE ORDER OF THE DAY





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# CONTENTS

## 7 Pole Position

Stuart Sykes, Editor

## 8 World News

Dan Knutson

## 11 On the Other Hand

Maurice Hamilton

An alternative view of Grand Prix proceedings from PET's prize columnist

## 14 Brazilian GP

David Tremayne

## 20 San Marino GP

David Tremayne

## 26 Rear View Mirror: Dijon '79

Nigel Roebuck

The first of a regular reflective series recalls a wheel-banging Arrows-Villeneuve French GP

## 30 F1 People: the real Professor

Sid Watkins, neon surgeon and head of Grand Prix medical services, talks to Roger Chown about his motor racing operations



## 34 Ligier's International Blend

Johnny Rives

The distinguished Grand Prix correspondent of French sports paper L'Equipe weighs up the prospects for a team saving for a rainy day

## 40 Ciccio and Nino: the Car Dealer and the Cavalryman

The World Champion's 21 SWs on Italy's heroes

## 44 Turbo to N/A: new dawn in Formula 1?

David Tremayne

and writes for the disappearance of the turbo engines from the summit meetings

## 50 Outside Looking In: Martin Donnelly

Andy Smith

begins a new series on people on the F1 fringe

## 54 Looking forward to 40: the other Professor

Is Alan Prost in his final season as the world's finest driver?

Alan Henry has his doubts

## 58 Back to the Front?

Tyre wars are back, and so are Pirelli. Why?

Dan Knutson asks all the questions

## 63

## No Backing Off

Dan Knutson

on the commitment of Ferrari's Gerhard Berger

## 69 Straight Lines: The DEREK WARWICK Column

No punches pulled, no corners cut: the USAF Arrows driver is PET's inside columnist

## 74 Speed Reading: Grand Prix books reviewed

## 78 Pitfalls: life on the pit lane's lighter side



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# POLE POSITION

## THE EDITOR'S PAGE



(John Townsend)

Breathing normally, Grand Prix racing took to the track again in Rio. Breathing less than normally, Grand Prix driver Philippe Streiff was, as this number of *Prix Editions International* went to press, still fighting for his life as a result of his massive accident in testing in Brazil. No-one can say when Philippe will take to the track again: first he must win the most famous victory of all. These two issues — Formula One's return to the glorious noise of atmospheric engines, and the risks run by men in racing cars — are central themes in this number of our magazine.

Our regular Grand Prix reporter **David Tremayne** also turns his attention to the outlawing of the turbo, while engines — old engines, new engines, borrowed engines and engines that just plain blew — feature prominently on many other pages. How thrilling it was, after what seemed like years of one-horse dominance, to watch so many cars join battle in Rio. Five teams in the top six finishers; six cars separated by a mere 18 seconds; seven changes of race leader — this was the true arithmetic of motor racing, adding up to a heartwarming start.

Heartbreaking, however, was the shadow cast by Philippe Streiff's high-speed accident, and the clouds of confusion that seem to have attended the response by those in charge. Such questions have been etched in people's minds, in the UK especially, by recent tragic events in another much-loved sport. Who better to address these issues than **Prof Watkins**, the extraordinary man in charge of matters medical at each Grand Prix? Neither he nor any member of the governing body FISA was responsible for the unconscionable delay in Streiff's hospitalisation, for this was a private test session arranged between teams and circuit owners. From another and more deadly point of view, our regular driver columnist **Derek Warwick** argues for

the revival of a drivers' association to protect the interests of the men at the sharp end. How, indeed, could such a grouping have been allowed to lapse? Derek might be the most popular first-time winner among a number of men poised, or so it seems, on the brink of that momentous feat. Other driver features in this issue turn the spotlight on people at opposite ends of the Formula One spectrum. Is the greatest of them all, Alain Prost, on the brink of giving up? **Alan Henry** asks the question we all want answered, while **Dan Kautson** finds Ferrari's Gerhard Berger in bullish mood despite defeat by new teammate Nigel Mansell. Mansell and Ferrari: Agip and water? The mixture was explosively successful in Rio. On the outside of all this, looking in, Martin Donnelly told **Andy Smith** how it feels to be so close, and to see his lifestyle inexorably changing as Formula One beckons.

Rio sunshine, rain in France; Ligier's recent contrasts of weather mirror the blue cars' slide from Formula One front-running to recent failures to qualify. Are Ligier wrong to retain the fierce streak of nationalism that has always fired the team? Seeking to reflect the truly international nature of Grand Prix racing, PEI is particularly happy to welcome distinguished French columnist **Johnny Rives** as he tests the waters with a team whose move away from Vichy may be the start of the long road back.

Back already are Pirelli, bringing with them the spirit of competition that prevails at all levels of Formula One. But back, too, is the spectacle of one-off qualifying laps which Goodyear's monopoly had allowed us to forget. How can qualifying tyres be in the best interests of safety? **Dan Kautson** poses this and other questions, being first, at every level, is the name of this peculiar game.

If the sheer pace of change in Formula

One dictates the return of Pirelli, or of Renault, or the arrival *en masse* of new Grand Prix aspirants, there is no harm in stopping now and then for breath, to savour moments from the sport's kaleidoscopic history: the past is as much a part of Formula One as are the present and its headlong future.

Our series on the World Champions takes up the theme of Italy; possibly the most fervent Formula One nation on earth, yet one that has produced just two World Champions — and only one for the Prancing Horse. In a new companion series of personal reflections, distinguished Grand Prix writer **Nigel Roebuck** relives the heart-stopping battle of two young lions in the French Grand Prix of a decade ago.

We hope to have gathered, in this first issue of PEI under its new managerial team, the strongest line-up of contributors the magazine has ever enjoyed. At its heart, as he will be in each issue, is your man **Maurice Hamilton**: one of the world's most respected writers on motor sport, but one whose clear grasp of realities is always lightened by that Irish twinkle in the eye. "On the Other Hand" is no mere alternative look at the Formula One scene: it is central to PEI's ambitions. All of us in this new team are glad to welcome back old friends, and to open our columns to writers and photographers who will become old friends. The same greeting goes to all our readers, old and new. If you don't like the new thrust, please tell us why; if you do like the look of our own new era, we'd still be pleased to hear from you.

STUART SYKES  
EDITOR

*Stuart Sykes*

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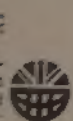
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IX ABTA



# World News

DAN KNUTSON

**R**io de Janeiro, Brazil — Last year McLaren built the ultimate race car; it won all but one Grand Prix. Now McLaren plans to build the ultimate road car.

McLaren Cars plans to design and manufacture a unique high performance road car to reflect the quality and technology which has been the hallmark of McLaren International's highly successful world champion Formula One team.

McLaren's super car should make its debut in about three years. McLaren plans to build 50 to 100 cars a year for this very select market which includes cars such as the Ferrari P40 and the Porsche 959.

Ron Dennis, however, does not see McLaren becoming like Porsche or Ferrari in the future. "We are not looking at any company and trying to be like them," he said. "We want to be McLaren."

It has been speculated that McLaren was considering another form of racing such as CART or the World Endurance Sports Car series. Dennis emphatically stated that "any other form of racing is definitely out for us as it would be counterproductive to our Formula One project."

Don't expect to see the McLaren road car on the track. "It's definitely intended not to be a race car," Dennis said. He added that McLaren would not support anyone who tried to race the car.

While the "super car" project will be separate from McLaren's Formula One effort, Dennis said that some things such as their wind tunnel would be shared. "My challenge is getting the business end right," Dennis said, "and making sure that it doesn't hurt the Formula One project."

McLaren designer Gordon Murray will oversee the design of the new road car. 1989 will be a transition year for him as he works on both the Formula One and the road car projects.

Directors of the new company, which will be funded largely by the TAG Group,

will include Dennis, Murray, Mansour Ojeh, Bob Ilman and Creighton Brown. Dennis said that McLaren had not made a decision on what type of engine the road car would use. How much will it cost? "Price is immaterial in this limited section of the market," he said. "The most important thing is the quality."

Alain Prost has put an end to the rumours that he plans to retire. "It's not true at all," the McLaren driver said when asked if he would quit racing at the end of the season. "I still want to race. I'm competitive and happy with the team. I'll let you know (about retiring)."



New season, newest team: Morleyton Dyrk (John Townsend)

Last year Prost and McLaren teammate Ayrton Senna formed an excellent working relationship and won all but one Grand Prix. How is that relationship this season, especially now that the new McLaren isn't as dominant as last year's model? Said Prost: "We saw that in this condition we are working together even better than before."

During pre-race testing the new McLaren Honda MP4/5 was about a second a lap faster than its nearest rival. Last year's McLaren was often two or three seconds faster than the other cars. Press reports that McLaren was in serious trouble upset McLaren boss Ron Dennis. "An awful lot of people have done an awful lot of speculation on something that's none of their business," Dennis said at a Marlboro McLaren Honda press conference



prior to the Brazilian. "A lot of cynics feel that McLaren is reversing a trend. That's not our opinion." The McLaren team feels that once the new MP4/5 chassis has more testing miles it will be even faster.

Designer Neil Oatley, assisted by Steve Nichols, was the project leader of the new McLaren MP4/5. The car will see two phases. Phase one concentrates on reliability, and the car will be fitted with modified versions of the gearbox and brakes used in 1988. Phase two will entail a weight cutting program, new rear suspension and front uprights plus a new transverse gearbox. The car has been built with a new "high modulus" carbon fibre which is lighter and stronger than the carbon fibre used last year. Constructed by the American Hercules corporation, this new carbon fibre is made available exclusively to McLaren.

Eleven of the 39 drivers on the Grand Prix entry list are Italian. France has six Grand Prix drivers, Great Britain has five, Brazil and Germany four each, Japan and Belgium have two, and the USA, Spain, Austria, Switzerland and Sweden can each claim one driver in the Formula One ranks.

Brazil marked Riccardo Patrese's 177th Grand Prix start — a record which tops Graham Hill and Jacques Laffite with 176 Grand Prix starts each.

Those who watch Grand Prix races on TV this season will get to see the action from cameras onboard the cars. Here in Brazil the two Canon Williams Renaults were fitted with cameras. According to one team manager, seven teams took the initiative to "improve the show". Williams, Ferrari, Arrows, Lotus, Benetton, McLaren and March will take turns carrying the cameras. Each Grand Prix will feature one team, and each team will carry the cameras for two races. Two races will be held "in reserve" in case of technical problems which could cause a team to lose coverage. Australian electronics whizz David Roberts, who was involved with last year's Indy TV coverage, built the equipment in six weeks flat, and says that more cameras per car will be seen eventually. Development costs of US\$800,000 will be met by the teams involved.

What is it like to drive the new non-turbo cars? "It's very easy to adapt to this style," Alain Prost said. "You don't even think about it. It's even easier (than driving a turbo) because you don't have to think about fuel and boost and so on."

When Alain Prost arrived in Brazil he joined the Williams crew for a seven hour wait in the Rio airport. It seems they had checked the "tourist" box on their entry documents, while the customs officials said that the teams were coming to work.

Brazil released a special postage stamp on March 23rd in honour of world champion Ayrton Senna.



"Fits me like a glove," says Eddie (Ericson Knight)

Eddie Cheever's new Arrows Ford A11 didn't pass technical inspection Thursday because the American couldn't wriggle out of the tight cockpit in the required five seconds. The crew installed a butterfly shaped steering wheel to give Cheever more room, and he was then able to make the "escape test" in under five seconds.

The drivers weighed in before the start of the first practice session. Formula One's new heavy weight champion is Mauricio Gugelmin at 80 kilos. At the other end of the scale are Satoru Nakajima and Roberto Moreno who tipped the scales at 59 kilos. All figures are complete with helmets and coveralls, incidentally.

Starting with round two of the Grand Prix championship, Italian Gabriele Tarquini will replace Philippe Streiff on the AGS team. Streiff was badly injured in an accident here during the test session held prior to the Grand Prix. Streiff has been flown home to France. It is still not certain whether he will be permanently paralysed. Tarquini had been out of a Formula One ride after the new FIRST team folded. Formula One's governing body FISA, meanwhile, issued a release saying that because Streiff's accident happened in private testing, it could not be held responsible for any safety problems.



Gabriele Tarquini: back to F1 with AGS — and in the India points (John Townsend)

When asked if his company plans to use a rotary valve engine in Formula One in the near future, Honda's Formula One project leader said no. Sources close to Honda say that a rotary valve system is under development. The advantage of the system is the elimination of the valve train components, and this allows the engine to rev higher. The disadvantage is weight, and the Honda V10 already has more than enough of that.

Brabham driver Stefano Modena is unusually superstitious. He always wears his right driving glove inside out. Here in Rio he asked that the team change the cars in the garage so that he would be on the right side.

The Brabham team lost two Judd engines even before the mechanics could install them in the cars. A fork lift broke at the airport and dropped the two engines on the tarmac.

Nigel Mansell's win in Brazil was the first for a Ferrari V12 engine since Gilles Villeneuve's victory at Watkins Glen in 1979. Both drove #27.

Slim is in 1989. Many of the new Formula One cars have very narrow cockpit areas. The footwell on some cars looks to be barely "two ankles wide." Frank Dernie designed the Camel Team Lotus chassis around driver Nelson Piquet. Lotus test driver Martin Donnelly, who has bigger hands than Piquet, was scraping his knuckles on the sides of the narrow cockpit until the team built him a smaller steering wheel. British Formula 3000 star Donnelly will be testing many miles for Lotus this season. It will be interesting to see how his lap times compare with Piquet's.

Didier Calmels has been arrested by French police for allegedly shooting his wife. Calmels and Gerard Larrousse are partners and owners of the LC Lola Formula One team.

It is reported that Calmels, a 38-year-old French lawyer, killed his wife Dominique with a shotgun in their house on the night of February 28th while their four children were asleep.

According to Lola driver Philippe Alliot, Calmels was very much in love with his wife but the relationship had deteriorated recently. Alliot was also quoted in the Italian press as saying that Calmels had been having a psychologically difficult time and wanted to commit suicide.

The Lola team still plans to contest the 1989 Formula One season.

Prix Editions congratulates Arrows on two new additions to the team: Eddie and Rita Cheever's new daughter Estelle and Mr and Mrs Jackie Oliver's new daughter Sophie.

Officials disqualified the times set by Rene Arnoux's Ligier and Pierluigi Martini's Minardi in Rio on Friday. The drivers heads were not below a line between the front and rear roll hoops. Both teams were fined US\$2000. Ironically, Arnoux and Martini are two of the shortest drivers on pitlane.

The 1989 season marks the start of the new non-turbo era. The glorious noise of V12, V10 and V8 3.5 litre engines filled the air in Brazil. Bring ear plugs if you plan to go to a Grand Prix this season. Seven types of engines could be found in pit lane: Ferrari V12, Ford V8 (in several versions), Honda V10, Renault V10, Judd V8 (in several versions), Lamborghini V12 and Yamaha V8.



# WANTED

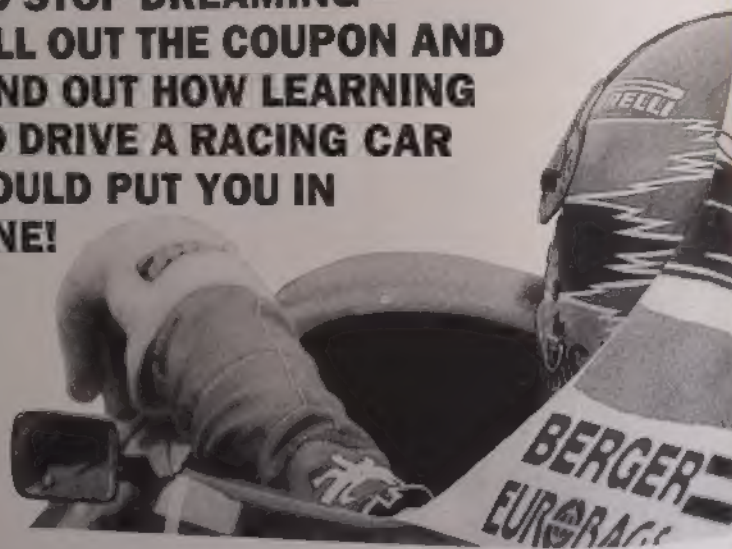
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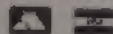
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John Mansell

THE MAURICE HAMILTON COLUMN

I had seen the look once before. It was at Long Beach in 1983 and I remember walking into the Convention Centre, heading for the paddock area and finding John Barnard wandering aimlessly around the McLaren enclosure. His glazed expression suggested he had just drunk a bottle of Scotch and decided it had been a pleasant experience. I'm not sure if John actually touches the stuff but, for a man possessing the same initials as Justerini & Brooks, why spoil a good story?

In any case, John had just witnessed his cars coming from the back of the grid to finish first and second. The fixed grin confirmed the impression that Barnard and the rest of his team had, at best, expected an early bath and, at worst, the agony of watching John Watson and Niki Lauda being lapped. The surprise nature of the victory had been similar to trudging to Heathrow and suddenly receiving a first class ticket to Australia when you expected to fly economy. The free champagne always tastes sweeter on those occasions.

It was the same in Rio on 26th March. John Barnard walked out of the Ferrari garage and it must have seemed as though he was treading on air. Nigel Mansell had driven a Ferrari to victory at the end of a weekend when the mechanical

problems almost outnumbered the army of critics prepared to write off Barnard and his car.

Quite how John managed to stop himself from climbing on to a packing case and waving two fingers at the pit lane and press room I'll never know. His knowledge of Italian is limited but I'm sure he has learned one or two choice phrases which he would have enjoyed slinging back at his tormentors.

Of course, John has been around long enough to realise that one win does not mean you should prepare your dinner jacket for the ceremonious back-slapping with Jean-Marie Balestre in December. Even so, that result must have brought intense relief, not to mention the public vindication of his project.

It was also a gift for Cesare Fiorio, the man who had been switched from Lancia to bring together a Grand Prix team which seemed to be polarising between Maranello and Guildford. Cesare is no fool either but his trials and tribulations in world championship rallying have taught him not to look a prancing gift horse in the mouth. Except that this was no freebee victory.

There had been the anticipated jokes before the event, of course. It had been suggested that Cesare would try and place service vans around the circuit,

given the Ferrari's penchant for rolling to a halt as frequently as one of the red buses which Nigel used to advertise.

Riccardo Patrese was one of the few people not to be surprised by the Ferrari victory. He had worked with Fiorio on the Lancia sportscar team and knew all about Cesare's Midas touch. "I wasn't too bothered about Ferrari but, when I heard they had moved Fiorio to Formula One, I became worried," he said. "Everything that man does turns to gold."

Yes, but so soon? John Barnard's bemused expression suggested otherwise. But it was an emotional moment, one of several in the paddock that sultry afternoon.

In the garage next door to Ferrari, an enormous weight had been lifted from the shoulders of Peter Collins. The Benetton-Ford team manager had willingly carried the responsibility of signing Johnny Herbert but there must have been private moments when the rising tide of criticism threatened to wear Collins down. Yet, throughout the winter, Collins had said Johnny Herbert is *THE* man.

I had my doubts, not so much about his natural ability, but about the strength to exercise it for 61 laps at a place like the Autodromo Nelson Piquet. The race was longer than anything Herbert had ever



done before, and certainly hotter than the average Easter Sunday in Essex. When it was all over, I watched from the fence by the scrutineering bay as the survivors came to a grateful standstill after 99 minutes of punishment in 105 degrees.

I expected to see the lad meander through the gates on automatic pilot and roll straight into the fence or, preferably, a certain FISA official. But there was no sign of the semi-comatose driver which most of us had predicted. Apart from receiving a gentle hand as he initially began to wriggle free, Herbert stepped from the car unaided, hopped to the left-front wheel, sat down and took another swig of his drink. Then he stood up, peeled off the top of his overalls and sat down again. His tee-shirt was saturated and his face flushed, but then he was no worse than those around him. Indeed, he was in better shape than the winner.

Over in the far corner, a man from FISA was busy massaging Mansell's bum and thigh and, to tell you truth, I didn't know who to feel sorry for. As Nigel was helped towards the rostrum, Herbert hobbled off in search of his bicycle, his work done for the day. It had been a truly remarkable performance by both drivers.

On the other hand... (KAT) bottom left On the other hand... (KAT) bottom left On the other hand... (KAT) bottom left

A few minutes later in the Benetton garage, Herbert was re-united with Collins. It was one of the most dignified and emotional sights I have seen in a hard-nosed business not exactly renowned for such behaviour. Collins, an Australian of a friendly but brusque persuasion, could barely speak. Sure, Johnny had personally removed Collins's neck from the chopping block, but both men fully deserved to savour the moment. Had it not been for Collins's refusal to be swayed from his belief, young Herbert would probably still be languishing in Formula 3000.

Of course, there was pandemonium in the British end of the press room. They didn't know where to spray their exultant phrases next; Mansell winning in a Ferrari conceived by the banks of the River Wey in Surrey; Herbert fourth; Warwick fifth; Palmer seventh; a strong drive from Brundle in the Brabham. And, when Mansell then dropped the trophy, the headline writers' day was complete. It was the best sports story of the weekend. In London, editors generously cleared the back pages and then told us hacks in Rio that there were 60 minutes in which to fill the space with flowing prose. Or, to be precise, explain why most of us had said, with great authority, that Nigel Mansell and Ferrari had about as much chance of winning the Brazilian Grand Prix as Edwina Currie had of becoming head of the Egg Marketing Board.

At the end of the day, Martin Brundle probably got a raw deal since his run into eighth place (behind Gugelmin) before retirement was relegated to the final paragraphs in the light of such brilliance elsewhere in the race. The Brabham effort had been impressive. When the teams with the difficult task of pre-qualifying rolled out on Friday morning in Rio, it was clear that Brabham knew precisely what they were doing. And, behind all of this, it was easy to detect the guiding hand of Bernard Ecclestone. For instance, the cars were turned out in the immaculate pinstripe paint scheme over which Bernie has been known to bring the factory to a halt if one line was so much as a millimetre out of true.



Sure enough, Bernie was there in the Brabham pit, watching Brundle and Stefano Modena pre-qualify comfortably. He was talking with Joachim Luthi, the man who, we are told, actually owns the team. We had also been informed early in the proceedings that Mr. Luthi was keen to keep a low profile. If wearing a Brabham shirt and a colourful assortment of headgear, and then decorating the pit with dusky ladies in denim, is how you play an unassuming role, then Jean-Marie Balestre had better watch out if Mr. Luthi ever changes his mind and comes on strong.

The team, now managed by David Stubbs, is a credit to the Brabham name and they even manage to cope with Modena's superstitions. I mean, this man makes walking under a ladder seem as foolish as refusing to leave the house because there is a vowel in the month. He changed hotel rooms a couple of times until he found one with the bed facing in the right direction and then the cars had to be shuffled around in the cramped garage because Stefano insisted on his being parked on the right. All harmless stuff and you can't knock him for it, but it could prove to be a trial by the time the team reach Adelaide in November. And quite what Stefano will do when the cars are parked line astern



in the Monaco pit lane, I'll await with interest.

The important thing, however, is that Modena is an ace in the making and Brabham have an aggressive young line-up in the Capelli/Gugelmin mould. In the meantime, the team will concentrate on sorting out serious matters such as the official hand-outs in Brazil which referred to the cars as Brabham-Fords for two days before someone finally gave John Judd credit where it was due.

There were a number of bleary-eyed mechanics on the flight home, a race meeting compounded by the arrival of new cars having taken its toll. The Arrows team were particularly subdued, their mood matching Derek Warwick's introspective manner the previous day as he walked slowly and silently from his car.

He finished fifth. He could have finished first. Two lengthy pit stops had proved costly. The first had been caused by Warwick letting the clutch out too soon and spinning the rear wheels before the nuts had been tightened. At the second, the rear jack was not placed properly, causing the car to droop to one side,

thus preventing the speedy removal of the right-hand wheels. And then DelBoy stalled in his anxiety to rejoin.

The Arrows mechanics had been up all night, returning to their hotel for a brief rest before going on duty again on race morning. The cars were brand new and the fact that Warwick's A11 actually finished the race was a tribute to the preparation by the mechanics and the work of the design team at Milton Keynes, particularly the engineers in charge of the transverse gearbox.

These things are easily forgotten in the heat of the moment, of course, and a member of the management is reported to have made it clear that he thought the mechanics had lost the race. After waiting 10 years for a win, such frustration can be imagined. But so can the disillusionment which then washed over one or two members of the weary team.

Jackie Stewart has always maintained that emotion is a dangerous thing in the cockpit. It can have a detrimental effect in the pit lane too. But, in Rio, most of it had been of a memorable kind. ■





1989 FORMULA ONE GRAND PRIX CHAMPIONSHIP — RACE NO.1

# RACE REPORT RIO

DAVID TREMAYNE



(Allsport/Pascal Robin)

After Nigel Mansell's stunning victory in the Brazilian Grand Prix the bells chimed long into the night throughout Italy as the shockwaves ebbed and flowed. In Maranello, home of the greatest of all racing teams, the celebrations knew few bounds. When he had set a new atmosphere record for Fiorano on his first ever run in a Ferrari (the interim 639 version of the F1/89), Mansell had already captured the hearts of the Ferrariists. Now, they hardly knew what to make of it all. They draped Union Jacks alongside the Tricolours, hung giant posters of him throughout the town, Mayor Giorgio Gubertini pronounced his intention to commemorate him with a bronze bust in the Ferrari museum. He hailed him as a spiritual son, "who has brought us great glory". If the scenes of joy were extraordinary, so was the very success itself. Throughout testing the 639 and 640 versions of John Barnard's F1/89 had proved woefully unreliable. Mansell once described how its semi-automatic transmission had temporarily become fully automatic on one occasion at Paul Ricard, when it grenaded the five-valve V12 shifting itself from seventh to

third along the back straight. And his very car in Rio had been devastatingly unreliable. In three of the four sessions it ground to a halt when the hydraulic oil pump in the gearbox broke... And yet, the week before FOCA testing began in Brazil, Mansell had set what would be the fastest lap (1m 36.00s) anyone would manage until Ayrton Senna blitzed his McLaren-Honda MP4/5 on to the pole in the Saturday qualifying session. That in itself gave the lie to off-season rumours fanned by Ferrari itself in a masterpiece of sandbagging that the V12 was desperately short of power. I once asked Mansell to compare it to a Judd and he refused, diplomatically. The clear inference was that it had around 680bhp max. Yet down Rio's long straight it gave nothing more than a mile or two an hour away to the McLaren and their supposedly 640/650bhp Honda V10s, or the Williams with their 630bhp Renaults. And though it was highly unexpected, Mansell's victory was no Monza. There was no last-minute fluke to tip the balance in Ferrari's favour. Ironically, however, it was the F1/89's ability to rocket off the startline that led to the circumstances in which

Mansell profited. The electro hydraulic box has a normal clutch that the driver can use to get off the line or away from pit stops. Both Mansell and Gerhard Berger felt they were either going to set off like Don Garlits, or bog down badly. Neither could be sure. As it turned out, Berger got an absolute flier and arrived at the inviting gap betwixt Riccardo Patrese's front row Williams and Senna just as it was closing. Undaunted, he slammed to the right and stayed there, foot hard down, as Senna began to edge across in that direction. The local hero's action was partly understandable desire to block his rival, partly an obligation as he too was squeezed by Patrese swooping across. As Berger still refused to lift, and stayed neck and neck with the McLaren despite his right-hand wheel being on the grass, contact was inevitable. The Ferrari half spun and gaunched itself into retirement over the kerb. Senna lost his nose wing and was thwarted for the second year running on home ground. Time was when Mansell was the driver least able to survive a Rio opening lap, but now Senna has taken up the mantle. It was one of those things that happen when two chargers refuse to concede

but a slight lift would probably have won the Brazilian the race... If the church bells were ringing in Maranello, alarm bells were sounding in Woking. Ron Dennis wore a resigned expression afterwards, but was inwardly desperately disappointed to have his dream of winning an entire season's races crushed so early. And there was the irony that, but for minor problems, McLaren would have won. If that sounds far fetched, consider this. The interim MP4/4Bs with V10 power have proved highly reliable and very quick, and the World Champion's brace of 1m25s MP4/5 qualifying laps were in a class of their own. And in the race Alain Prost still finished only 7.8 seconds adrift of Mansell even though he had been forced to make do with only two sets of tyres to the Briton's three. Rio is highly abrasive, and in race day's 106 degree heat all of the Goodyear runners knew in their hearts that they would have to stop twice. It was fortunate for Nigel that he had to, for in his second he also changed the steering wheel as its locking mechanism was working loose in the faster corners. Hardly an ideal development...

As he stayed out for lap after lap, Prost evoked all manner of questions. Was he trying to repeat his glorious precision of Mexico 1986, where he alone had got through on two sets of Goodyear? Was he banking on a very late charge on soft rubber? The answer was simple. His clutch had gone out of business just after that first stop on lap 14, and without it he would never be able to restart from his second. Like it or not, he was obliged to make it through on worn tyres. It is a mark of the man that he not only did so, but stayed out for 45 laps on the same set and still finished second. With a third set of tyres? "I have no doubt I would have won," he responded quietly. Instead, he looked highly likely to face late challenges from Patrese and Derek Warwick, but luck was with neither of them. In his record 177th Grand Prix, Riccardo had staggered one and all by topping Friday's qualifying despite everything McLaren and Ferrari threw at him, yet Saturday saw him at the base of the time sheet after an engine had failed and the replacement - installed in a brilliant 31 minutes! - had misfired. Unperturbed, he swept into the lead at the start and held it until Mansell overtook on lap 16. He was back in front on lap 21 when the Ferrari made its first stop, but thereafter Williams' gamble on trying to get by on two sets of tyres worked against him. He didn't stop until lap 25, and



Debut win for Mansell — the Ferrari packs a punch

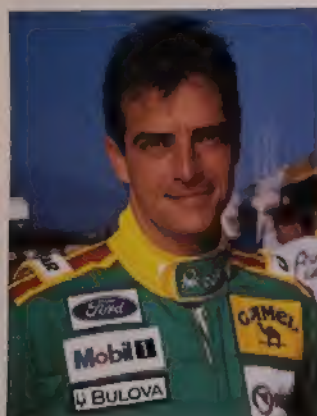
(A1)

Prestige number two on the day, though Guise's March was no real threat

(A1)







the delay sentenced him to scratch after his rivals from seventh spot. He was back up to a charging fifth by lap 50, closing fast on Johnny Herbert and Mauricio Gugelmin as they shadowed Prost. Indeed, for scant feet on lap 51 he was ahead of both, but literally the moment he passed the Brazilian's Leyton House March the Canon Williams threw a camshaft pulley and his race was over. Without that, he might well have caught and passed Prost in the remaining 10 laps, but the cruising Mansell would have remained beyond reach. Had he not stayed out so long on his first set of tyres the story might have been different, but the failure rendered that academic.

Ultimately, then, Williams had only Patrese's fastest lap as consolation in its most competitive showing since Adelaide in 1987. Thierry Boutsen, fastest right up until the closing day of testing, was still recovering from an almighty shunt that occurred in the week preceding the race when his Williams' rear suspension broke. Detuned or not, however, he was a useful second to Patrese for the first two laps and third for another when his engine cut out suddenly. Renault Sport's Bernard Dudot hypothesised that debris from the Senna tangle, which had smashed the Belgian's right mirror, might have been ingested into his RS01 V10. Nevertheless, the Didcot equipe and its new Gallic partner could draw satisfaction from a very competitive showing that augured well for its season.

Like Patrese, Warwick deserved better fortune in his 101st Grand Prix and the first at the wheel of a non-turbo. Ross Brawn's new USF&G Arrows A11 is clearly a good car, and the Englishman exploited its potential with a strong eighth on the grid alongside Ivan Capelli who was the best of the V8 bunch. By lap 16, as Mansell took the lead, DelBoy was up to third and closing on Patrese when he made his first stop four laps later. Cruelly, a sticking wheel delayed him, and exactly the same thing, plus a stall induced by tricky gear selection, levied a similar penalty second time around. By that time he had regained the position and, like Riccardo, might reasonably have expected to finish second by catching the tyre-conserving Prost in the closing stages. As it was, he had to be content with fifth. Capelli had been a fancied runner all along, the 1988 March having been honed into reliable state in 16 races. The Italian qualified well and was in third place, closing on Patrese, when he made his first stop. Shortly after,

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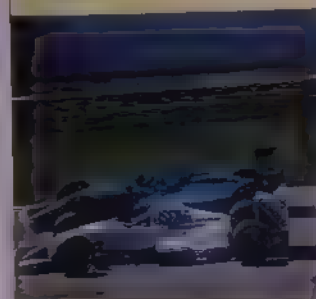
**FORMULA ONE**  
The rapid movement  
of curvaceous  
bodies through  
the air

Clockwise from top left:  
First hand wheel banging: Senna would lose out (Alparut)  
Pascal Houdouin: not a cloud in Nigel's sky (LAT)  
Bergin beats it back to the pits (John Townsend)  
Nannini nicks a point (John Townsend)  
First race: first points - Herbert performed miracles (LAT)



however the legacy of a wheel hanging session into the first corners manifested itself when he pulled in with a cracked rear upright. That left Gugelmin to fly the March flag, and on his home ground he rose to the occasion splendidly. Like Patrese, he had hoped to make it through with only one stop, but he acceded to Ian Phillips' orders eventually and came in a second time and was later relieved that he had. His B81 never missed a beat and he narrowly missed out on passing Prost in the final laps. The Honda was just too much for me on the straight, he explained after the most competitive showing of his Grand Prix career. If Prost was canny in tuning his first stop for lap 14, one of the earliest, Johnny Herbert revealed that he too is possessed of some remarkable thinking ability as a race driver. He had come to Rio under a cloud of controversy as some stated openly that they felt he shouldn't be allowed to compete because of his incomplete recuperation from his Brands Hatch F3000 accident last August. Shrug, that and his personal discomfort aside, he impressed by outqualifying Benetton team mate Sandro Nannini throughout, and then drove brilliantly in the race. Realising he couldn't quite keep pace initially with Patrese, Mansell, Prost, Capelli, Warwick and Nannini, he cannyly drove his own race: was the first Goodyear runner to pit on lap 13 and benefited the most. By lap 20 he was fourth and moved up to third when Patrese finally stopped. It was a mature showing that dispelled any doubts about either his fitness or ability and fully justified a tearful Peter Collins' faith in his protégé, and there was even more to come as he closed on Gugelmin and Prost in the closing laps and followed them across the line. Afterwards he said his ankles were fine and that his only problem was an inoperative drink bottle, but that switching on his cool hat helped alleviate the discomfort. It was indeed a star performance, against which the sixth-placed Nannini appeared somewhat detuned. Rio marked the return of Brabham to the Formula One arena and the Sergio Rinland/John Baldwin-designed BT54s proved particularly impressive when the ambient temperature was at its lowest. Both cars prequalified with ease and Martin Brundle and Stefano Modena were in the top four each morning, only to lose out in official qualifying when their Pirells became disadvantaged with the increased heat. They nonetheless qualified on row seven and were running strongly until

electrical and cv joint problems respectively sidelined them. While Alex Caffi was a surprise non-prequalifier after engine problems, Andrea de Cesaris ran well for Dallara until a recurrence of qualifying fuel pump problems dropped him from eighth, while similar irritations afflicted a revitalised Nelson Piquet in the new Camel Lotus 101. The Brazilian qualified in ninth and looked good initially before dropping away with failing fuel pressure but after buzzing two fudds in qualifying team mate Satoru Nakajima looked little more than pathetic as he struggled to finish an undeserved eighth ahead of newboy Olivier Grouillard.



With still figure: Gugelmin runs third, with Warwick's Arrows fifth.

As team mate Rene Arnoux failed to qualify with an imbalance in his new Ligier JS33, the F3000 graduate upheld team honour after an impressive struggle in a little tested car made more difficult by a first corner assault by Luis Sala's Minardi. Grouillard had braked hard as his throttle momentarily jammed, and the Spaniard took off a wheel as he hit him. To make matters worse for Minardi, his team mate Pierluigi Martini lasted only a lap more before lower engine mount sheared. Through the mayhem, Jonathan Palmer produced yet another cool drive in the unloved but modified Tyrrell 017B.



World champion Jonathan Palmer made a great start.

to place seventh, despite the loss of a brake cooling duct at 170 mph and the worry of one of his two front return springs breaking on lap 10, while team mate Michele Alboreto had a troubled return to Uncle Ken's fold. His race was blighted by a recurrence of his qualifying problems in changing gear and then an exhaust split. He survived however to beat the recovered Senna to the line after the champion had had two stops to fix his McLaren's nose, and two for tyres.

In marked contrast to Derek Warwick, Eddie Cheever had a miserable weekend, helped little by the tight fit he had to get into and out of his Arrows, and poor reliability that kept him to two laps at a time in qualifying. He was running ninth on lap 38 when he was rudely punted into retirement by Bernd Schneider at the end of the main straight, and collapsed twice with poor leg circulation as he tried to walk away. The German had scraped into a race for which team mate Aguri Suzuki failed to prequalify, leaving trail of failed Yamaha V8s in his wake but seemed to be running reliably when the 891's front suspension failed and involved him with the American Osella and Raul made the race with single car apiece, Piercarlo Ghinzani and Volker Weidler failing to prequalify, but Nicola Larini's occupation of 18th place was nullified by the black flag after he was adjudged to have lined up incorrectly on the grid. Christian Danner meanwhile, returning to the Formula One fold, lost a lot of time with a rear suspension problem and then stopped on his last lap with crownwheel and pinion failure. Larrousse Calmell didn't expect to qualify with its bulky Lola LC88D when the new LC88 couldn't be readied in time, but while Yannick Dalmas duly failed to get in, Philippe Alliot did and was delighted to achieve a 12th place finish on the debut of the glorious sounding Chrysler Lamborghini V12.

Neither Coloni made the grid, nor did Joachim Winkelhock in the old AGS. He along with the too new Muncy Onyx ORF-1s failed to prequalify while Gregor Foitek caused a sensation by getting through Friday morning's weeding out process, the Euro Brun, only to lose out on Saturday afternoon to engine failure. That performance, in its own way, was a sign of star quality. Rio, however, became unexpected Ferrari property on raceday, and while the McLaren's should have won, the fact is that they didn't. And, in many eyes, the championship as a result had got off to the best possible start... □

## 1988 FORMULA

GRAND PRIX

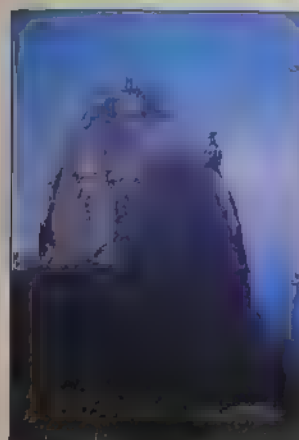
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Autodromo Nelson Piquet  
Rio de Janeiro

26th March 1989

Circuit Length: 3.127 miles/5.031 km

Laps: 61



## Drivers' World Championship

Pos	Driver
1	Nigel Mansell
2	Alan Prost
3	Mauricio Gugelmin
4	Johnny Herbert
5	Derek Warwick
6	Alessandro Nannini

## Constructors' World Championship

Pos	Team
1	Ferrari
2	McLaren
3	Benetton
4	March
5	Arrows

## Starting Grid

1	2
3	16
9	11
20	15
15	7
8	22
23	38
3	17
4	12
26	24
10	34
30	25

## Race Classification

Pos	Driver	Team
1	Nigel Mansell	Williams FW18
2	Alan Prost	Ferrari
3	Mauricio Gugelmin	Benetton B188
4	Johnny Herbert	Lotus 99T
5	Derek Warwick	Arrows A18
6	Alessandro Nannini	Benetton B188
7	Stefano Modena	Benetton B188
8	Jonathan Palmer	Tyrrell 017B
9	Christian Danner	Ligier JS33
10	Volker Weidler	Osella
11	Piercarlo Ghinzani	Osella
12	Philippe Alliot	Chrysler
13	Gregor Foitek	Euro Brun
14	Joachim Winkelhock	AGS
15	Luciano Burti	AGS
16	Satoru Nakajima	Lotus 99T
17	Rene Arnoux	Ligier JS33
18	Nicola Larini	Lola
19	Luca Badoer	Minardi M18
20	Luis Saldaña	Minardi M18
21	Roberto Benetton	Benetton B188
22	Andrea de Cesaris	Dallara
23	Alex Caffi	Dallara
24	Stefano Modena	Benetton B188
25	Jonathan Palmer	Tyrrell 017B
26	Christian Danner	Ligier JS33
27	Volker Weidler	Osella
28	Piercarlo Ghinzani	Osella
29	Philippe Alliot	Chrysler
30	Gregor Foitek	Euro Brun
31	Joachim Winkelhock	AGS
32	Luciano Burti	AGS
33	Satoru Nakajima	Lotus 99T
34	Rene Arnoux	Ligier JS33
35	Nicola Larini	Lola
36	Luca Badoer	Minardi M18
37	Luis Saldaña	Minardi M18
38	Roberto Benetton	Benetton B188
39	Andrea de Cesaris	Dallara
40	Alex Caffi	Dallara

## Non Qualifiers

## Non-Pre Qualifiers



# IMOLA



Two races, two very different results. That was the sum of the Brazilian and San Marino GPs as the 1989 World Championship settled itself in. Each, in very different ways, had been something of a renaissance for John Barnard, out of the F1 limelight all through 1988 as he worked away on the normally aspirated V12 project. In Rio his 640 version of the F1 89 had won. In Imola it didn't. Indeed it couldn't even get close to the McLaren for which Barnard himself had once been responsible. On its home ground however on the newly renamed Autodromo Enzo e Dino Ferrari the F1 89 was to be proved just about as thoroughly as it will ever have to be. It Rio proved that Barnard hasn't lost his touch and can still design innovative winning cars. Imola proved that he can also build machines of immense structural integrity. When Gerhard Berger's car speared away from pursuit of Ayrton Senna, Alain Prost, Nigel Mansell and Riccardo Patrese as they sped through the daunting Tamburello for the fourth time, and slammed into the outside wall at around 170mph, observers feared the worst. The F1

89 never made the turn, but went straight into the wall before spinning down it, coming to rest, and then bursting into a frightening ball of flame. Few could believe that he could survive, or that his injuries if he did would be anything but severe. The day after the biggest accident of his F1 career, however, Berger discharged himself from the Maggiore Hospital in Bologna and headed back to Innsbruck for some plastic surgery, intent on rejoining the circus in Phoenix. It was, without danger of hyperbole, one of those miracle escapes. In the second Ferrari, Mansell had thrilled the tifosi with his chase of the McLaren's early on, but at the restart he was beaten away by Patrese as well, and finally rolled to a halt after 24 laps with gearbox failure. His retirement ended a bad weekend for the Prancing Horse in which not only the electric hydraulic valves in the transmission had again played up, but gearbox casings had cracked. There were those who believed Mansell had lost his taste for racing in the restart - and how he nobody could have blamed him, after seeing

his team-mate's accident - but the fact is Mr Mansell falls into the abnormally brave category, and he was pushing Patrese for all he was worth when his car gave up. Testing the previous week had already indicated that, as last year the Honda Marlboro McLaren would walk away. They'd run then for eight days, with eight different specifications of Honda V10 to try, and they simply wiped the floor with everyone else. Prost's best race time, the fastest lap of 1m 26.71s, was only a hair off his qualifying best, and Senna's pole, such was their incredible pace. Thierry Boutsen had the third fastest race lap after Prost and Senna, but it was only 1m 29.571s. There was thus no disguising the Honda Marlboro McLaren was right back on top. Suspicions that, but for Senna's impetuosity and Prost's lack of a clutch, the MP4 5s would have wiped up in Rio too, were thus confirmed. So there was nothing unusual about their dominance just something as breathtaking as it has ever been. The real story of HMM at Imola however, concerned the hasty departure of Prost after the race. fol-

lowing a blazing Dennis. Now Prost most well adjusted sport. He knows he is, can live with is dignified even without the scream of a rally, even when from journalists at polite almost apologetic you knew how he even refused with his closest friends Johnny Rives and Jean-Pierre Jarier. But what on earth had happened? One could only guess. In Adelaide he had said that he wouldn't tolerate the existing set up into 1988, and his sole comment in Imola was that the orders were not observed. Nobody elaborated on what those orders might have been or who might have given them, but if all is not well in Dennis Kingdom there may yet be tears in Wonderland, and that might just prove the chink in the corporate armour. Certainly, after Imola, that's what everyone else will desperately be hoping. If Ferrari couldn't offer a true challenge to the McLaren, neither could Williams, and that hurt. In testing Patrese had managed similar race times to the MP4 5s, but come the meeting proper the FW12Cs

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Second Start and Prost's accident. Prost's accident.





When Rikie Cheever qualified an excellent fourth in Friday's wet conditions it seemed his fortunes might finally be about to pick up, but Saturday brought a host of minor mechanical troubles that restricted him to 21st on the grid. Wringing everything from the A11, he climbed as high as sixth before his now cracked exhaust problem worsened and he slumped to an even less than 11th. At least he was more comfortable in his car however, after wrapping of the fuel tank had given him room to move and at least he had seen his team mate better than did Satoshi Nakajima. The Japa-



Facing page: top: Stirring stuff from Palmer in the new  
Tynes-Klein Saffron Centre. No hold up for Harman on the  
medium again (Sporting Pictures); bottom: Warwick looking  
forward for more points. John Townsend



ness was once again unimpressive and was classified 44th after losing many laps with electrical problems. Like Nikaap de Cesaris, Sala and Ghisani were overshadowed by their team mates. The Dallara driver seemed to feel that in Arnoux's absence the mantle of hauling fell on his shoulders, and he successfully inhaled out of the gravel at Acque Minerali just as Sala became permanently bogged in it. The Spaniard had gone off trying to avoid the Italian's BMW 189i. Ghisani failed to prequalify.

In the Brabham camp, however, Modena and Brundle showed again how evenly matched they are. Ironically, after two cars had failed on him on Saturday, the Italian used

Brundle's selfish ambition — and went **queer** — Mr. Mordred, in the **process** Mordred was the school **clerk** — **quite** but the clutch packed up on **Stelms** before the Englishman got his second chance.

Herbert's dash was back in charge as team director, rejoining after a year's sabbatical with FISA, and very soon again the cars started their weekend well by prequalifying with ease, only to go slower as qualifying went on. In fact Modena's 1m 27.480s from Friday morning's rabbit hour was his fastest all weekend, and had he been able to repeat it, would have netted him third slot in the grid. To add to the feeling of frustration Martin felt he could have had a shot at the overnight pole had he followed his nose and used slicks right at the end as the track was drying out. Instead, Stefano lined up 17th. Martin 22nd after irritating problems, and they scrapped in the big race to date that comprised Cheever, Herbert, Jarquim, Gugelmin and Nakajima. Modena, who'd been in trouble anyway with his brakes, lost it going through the right hander down to Rivazza and came to rest

...the horrible 10-hour drive. It was joined Alberto Tomba and Christian Darné. At 11.55 a.s. it was over, up 2nd 1476 temperatures, on the Sunday. Already prequalifying had also weeded out the imprudent. Only ORF 15. Tosters bravely driven Euro Brun. Windlocks fifth gearless AGS. Weidlers mechanically ravaged Rbl and the desperately missing 2. success.

Fortunately for Gerard Larrousse's debutant Lola T889 didn't have a prequalify but Philippe Alliot and Yannick Dalmas nonetheless had an awful time. A last minute swap from Magneti Marelli to B. self cleaners — Larrousse wanted to try both. Magneti Marelli said make your mind up one way or the other created teething glitches from which they never recovered. Dalmas car wouldn't fire up for the first start and by the time it did was denied the restart while Alliot managed no official laps as he never actually crossed the start/finish line during his very brief race.

At one stage it seemed that the new Tyrrell 018 would have a similar fate on its debut a whole host of niggling new car problems preventing Michele Alboreto from qualifying the vile exercise completed in time. However Jonathan Palmer had gun in with his 017B so the new car was substituted. Its set up was changed drastically overnight and the restart allowed the team to adjust on ferocious oversteer which had spun Palmer on the opening lap at 108. Thereafter the Dns was flying. Rising to the occasion he pulled the 018 from Tyrrell's fire by charging to an excellent sixth (possible fifth if the appeals are rejected) as the sleek new Harvey Postlethwaite team Claude Regout design got faster and faster.

It was good to know that at even a minor McLaren had some serious internal problems to mar its day. The team went home from San Marino with its tail well and truly up. And, to be honest after 1988 very few begrudged the fact that it should be Uncle Ken's.



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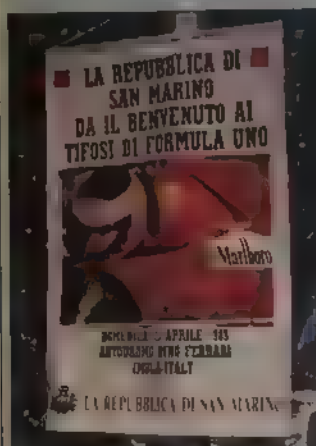
# SAN MARINO

Autodromo Dino Ferrari,  
Imola

23rd April 1989

Circuit Length: 3.132 miles/5.040 km

Laps: 61 (reduced to 59)



## Official Starting Grid

1	28.0	1	2	Alan Prost	13
3	27.92	27	6	Michael Schumacher	21
4	27.84	28	5	Thierry Boutsier	26
11	27.84	19	11	Nelson Piquet	27
21	27.69	21	26	Didier Theard	28
23	27.62	23	9	Nigel Warrick	29
16	27.45	16	17	Nelson Piquet	30
24	27.44	24	22	Andrea Agnelli	31
8	27.26	8	40	Nelson Piquet	32
15	27.16	15	30	P. L. P. A. J.	33
10	27.11	10	7	Mark Blundell	34
20	27.04	20	12	Stefan Johansson	35
3	26.98	3	29	Stefan Johansson	36

## Race Classification

Pos	Driver	No	Team	Time	Points
1	A. Prost	2	McLaren-Targa	1:28:45	10
2	A. Schumacher	2	McLaren-Targa	1:29:00	6
3	A. Boutsier	4	Benetton	1:29:15	4
4	A. Piquet	11	Williams	1:29:30	3
5	A. Theard	26	Williams	1:29:45	2
6	A. Warrick	9	Williams	1:29:55	1
7	A. Agnelli	22	Williams	1:30:05	0
8	A. Piquet	40	Williams	1:30:15	0
9	A. Blundell	7	Williams	1:30:25	0
10	A. Johansson	12	Williams	1:30:35	0
11	A. Johansson	29	Williams	1:30:45	0
12	A. Johansson	35	Williams	1:30:55	0
13	A. Johansson	36	Williams	1:31:05	0
14	A. Johansson	37	Williams	1:31:15	0
15	A. Johansson	38	Williams	1:31:25	0
16	A. Johansson	39	Williams	1:31:35	0
17	A. Johansson	40	Williams	1:31:45	0
18	A. Johansson	41	Williams	1:31:55	0
19	A. Johansson	42	Williams	1:32:05	0
20	A. Johansson	43	Williams	1:32:15	0
21	A. Johansson	44	Williams	1:32:25	0
22	A. Johansson	45	Williams	1:32:35	0
23	A. Johansson	46	Williams	1:32:45	0
24	A. Johansson	47	Williams	1:32:55	0
25	A. Johansson	48	Williams	1:33:05	0
26	A. Johansson	49	Williams	1:33:15	0
27	A. Johansson	50	Williams	1:33:25	0
28	A. Johansson	51	Williams	1:33:35	0
29	A. Johansson	52	Williams	1:33:45	0
30	A. Johansson	53	Williams	1:33:55	0
31	A. Johansson	54	Williams	1:34:05	0
32	A. Johansson	55	Williams	1:34:15	0
33	A. Johansson	56	Williams	1:34:25	0
34	A. Johansson	57	Williams	1:34:35	0
35	A. Johansson	58	Williams	1:34:45	0
36	A. Johansson	59	Williams	1:34:55	0
37	A. Johansson	60	Williams	1:35:05	0
38	A. Johansson	61	Williams	1:35:15	0
39	A. Johansson	62	Williams	1:35:25	0
40	A. Johansson	63	Williams	1:35:35	0
41	A. Johansson	64	Williams	1:35:45	0
42	A. Johansson	65	Williams	1:35:55	0
43	A. Johansson	66	Williams	1:36:05	0
44	A. Johansson	67	Williams	1:36:15	0
45	A. Johansson	68	Williams	1:36:25	0
46	A. Johansson	69	Williams	1:36:35	0
47	A. Johansson	70	Williams	1:36:45	0
48	A. Johansson	71	Williams	1:36:55	0
49	A. Johansson	72	Williams	1:37:05	0
50	A. Johansson	73	Williams	1:37:15	0
51	A. Johansson	74	Williams	1:37:25	0
52	A. Johansson	75	Williams	1:37:35	0
53	A. Johansson	76	Williams	1:37:45	0
54	A. Johansson	77	Williams	1:37:55	0
55	A. Johansson	78	Williams	1:38:05	0
56	A. Johansson	79	Williams	1:38:15	0
57	A. Johansson	80	Williams	1:38:25	0
58	A. Johansson	81	Williams	1:38:35	0
59	A. Johansson	82	Williams	1:38:45	0
60	A. Johansson	83	Williams	1:38:55	0
61	A. Johansson	84	Williams	1:39:05	0
62	A. Johansson	85	Williams	1:39:15	0
63	A. Johansson	86	Williams	1:39:25	0
64	A. Johansson	87	Williams	1:39:35	0
65	A. Johansson	88	Williams	1:39:45	0
66	A. Johansson	89	Williams	1:39:55	0
67	A. Johansson	90	Williams	1:40:05	0
68	A. Johansson	91	Williams	1:40:15	0
69	A. Johansson	92	Williams	1:40:25	0
70	A. Johansson	93	Williams	1:40:35	0
71	A. Johansson	94	Williams	1:40:45	0
72	A. Johansson	95	Williams	1:40:55	0
73	A. Johansson	96	Williams	1:41:05	0
74	A. Johansson	97	Williams	1:41:15	0
75	A. Johansson	98	Williams	1:41:25	0
76	A. Johansson	99	Williams	1:41:35	0
77	A. Johansson	100	Williams	1:41:45	0

## Drivers' World Championship

Pos	Driver	Points
1	A. Prost	27
2	N. Mansell	15
3	A. Schumacher	10
4	A. Boutsier	7
5	A. Piquet	4
6	A. Theard	2
7	A. Warrick	1
8	A. Agnelli	0
9	A. Piquet	0
10	A. Blundell	0
11	A. Johansson	0
12	A. Johansson	0
13	A. Johansson	0
14	A. Johansson	0
15	A. Johansson	0
16	A. Johansson	0
17	A. Johansson	0
18	A. Johansson	0
19	A. Johansson	0
20	A. Johansson	0
21	A. Johansson	0
22	A. Johansson	0
23	A. Johansson	0
24	A. Johansson	0
25	A. Johansson	0
26	A. Johansson	0
27	A. Johansson	0
28	A. Johansson	0
29	A. Johansson	0
30	A. Johansson	0
31	A. Johansson	0
32	A. Johansson	0
33	A. Johansson	0
34	A. Johansson	0
35	A. Johansson	0
36	A. Johansson	0
37	A. Johansson	0
38	A. Johansson	0
39	A. Johansson	0
40	A. Johansson	0
41	A. Johansson	0
42	A. Johansson	0
43	A. Johansson	0
44	A. Johansson	0
45	A. Johansson	0
46	A. Johansson	0
47	A. Johansson	0
48	A. Johansson	0
49	A. Johansson	0
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79	A. Johansson	0
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81	A. Johansson	0
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87	A. Johansson	0
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89	A. Johansson	0
90	A. Johansson	0
91	A. Johansson	0
92	A. Johansson	0
93	A. Johansson	0
94	A. Johansson	0
95	A. Johansson	0
96	A. Johansson	0
97	A. Johansson	0
98	A. Johansson	0
99	A. Johansson	0
100	A. Johansson	0

## Constructors' World Championship

Pos	Constructor	Points
1	McLaren-Targa	27
2	Benetton	15
3	Williams	10
4	Williams	7
5	Williams	4
6	Williams	2
7	Williams	1
8	Williams	0
9	Williams	0
10	Williams	0
11	Williams	0
12	Williams	0
13	Williams	0
14	Williams	0
15	Williams	0
16	Williams	0
17	Williams	0
18	Williams	0
19	Williams	0
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96	Williams	0
97	Williams	0
98	Williams	0
99	Williams	0
100	Williams	0

## Non Qualifiers

No	Name	Team
1	A. Johansson	Williams
2	A. Johansson	Williams
3	A. Johansson	Williams
4	A. Johansson	Williams
5	A. Johansson	Williams
6	A. Johansson	Williams
7	A. Johansson	Williams
8	A. Johansson	Williams
9	A. Johansson	Williams
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90	A. Johansson	Williams
91	A. Johansson	Williams
92	A. Johansson	Williams
93	A. Johansson	Williams
94	A. Johansson	Williams
95	A. Johansson	Williams
96	A. Johansson	Williams
97	A. Johansson	Williams
98	A. Johansson	Williams
99	A. Johansson	Williams
100	A. Johansson	Williams



## BY NIGEL ROEBUCK



France's real hero on the day — Pierre AUGER.



27









## Doctor's Orders

BY ROGER CHOWN

It takes F1 cars about 90 seconds to lap the Imola circuit. In a blazing car much less time would be needed to die. Gerhard Berger owes his life to a number of people — the designers of the Ferrari's monocoque, the manufacturers of the flame proof overalls, the firemen who put out his blazing Ferrari. Most of all he should be grateful to the team of doctors who knew how and when to remove him from his car exactly what to do to maintain his life and what precisely had to be done with him when he arrived at the circuit hospital covered in petrol, burnt with orthopaedic injuries, concussed and unaware that he had survived one of the most terrifying accidents seen in Grand Prix racing for many years.

In charge of the medical services is a neurosurgeon. He is not just any neurosurgeon but one of the most eminent men in his field and one of the most respected men in Grand Prix racing. He is Professor Sidney Watkins, MD, FRCS. To his friends he responds to 'Sid' or 'Prof'. He is a man with a major sense of humour, outstanding skill and a quite ruthless sense of purpose when it comes to safety in GP racing.

A weekend in the company of doctors was always going to have its moments. For the San Marino Grand Prix there were three 'public' ones — two shunts in practice involving first René Arnoux then Gerhard Berger, and the massive and massively publicized furnace that so nearly ended in tragedy. Examination of all three was to provide a clear view of what is involved in saving drivers' lives.

At 6 a.m. on Friday a team of doctors and nurses assembled at the medical centre located at the entrance to the pit lane. They were headed by Italian Doctor Piana. Sid Watkins began his inspection at 6.30 a.m. Firstly the Centre itself was scrutinized in great detail. It comprises a 'casualty' ward with four beds, an intensive care ward, an X-ray room and an operating theatre, the components were checked against a prescribed list — from the basics of ensuring that there was light, water, electricity etc., to the more complex rituals of testing calipers, scalpels, respirators, defibrillators etc., this mini hospital's inventory was matched to FISA regulations. There were some revealing items on the checklist — the security of the hospital, the proximity

of the medical helicopter to the centre, the access of ambulances to the circuit and the centre, the communication equipment so vital in the event of an emergency.

The Centre itself examined, the personnel list was then checked. The Centre doctors included specialists in general surgery, anaesthetics, chest burns, neurosurgery, orthopaedics and paramedics. The track doctors were anaesthetic doctors — a total medical staff of 32, all unpaid volunteers.

Mario Casoni used to be a professional sports car driver — his task for the weekend was to drive Sid Watkins and the charming English-speaking Doctor Federico Baccarini. After everyone the centre had been checked and the credentials ascertained, the track

came the focus. At Imola mini-medical units — at least one doctor, the case of four of interception vehicles — to the scene it added to the fast starting grid, the aggressive — a 'fast' could reach the scene within 30 seconds. I wondered why cars he driving at very high speeds circuit when practice sessions finished, consider this. Mario's first 'quick' lap was 2 minutes 37 seconds. "Too slow" said Sid. 2 minutes 37 seconds, then 2 minutes 37 seconds. These were the improvements as driver and car became attuned. On race day with more tyre pressure, the circuit was completed in 2 minutes 28 seconds. Reaching the

accident quickly is the key to saving lives as Gerhard Berger was to discover. Practice for these drivers is as critical to life-saving as practice is for GP drivers, in their chosen profession. Prof toured the circuit to check that the team were in place. Each of their ambulances had been looked at, each piece of equipment checked, the routine was established. Inside Professor Watkins' own car was a mobile medical kit, an orange box containing every form of hand-held device of which one of the most important is the laryngoscope, a device for opening the throat so that an airway can be inserted with a balloon on the end so that if the patient vomits he doesn't aspirate the vomit into the lungs. A big mouthpiece for oxygen is used, "large for racing drivers because they all have big mouths" quipped the Professor. He has his own kit of which scissors and seat belt cutters were two important items.

The most potentially dangerous part of a Grand Prix is the start which is why medical cars follow the first lap. Apart from this the last 15 minutes of timed qualifying on the last day is the most likely time for an accident to occur.

I wondered why the track doctors were all anaesthetic specialists. "This is the critical life-support function. They are not there primarily to provide a pain killing role."

With just 40 minutes or so remaining of untimed practice on Friday, conversation about medicine was abandoned in favour of practical application. The red flag came out to halt the session. With eyes carefully looking behind to ensure that no Grand Prix car was live on the circuit, Mario gave a demonstration of his experience as the Prof's car hurtled towards the incident. In contact with the Control Tower by radio and the conversation audible to all the

trackside service points was heard that Arnoux's Ligier had hit the armco and in the process destroyed. By the time the first medical intercept car reached the scene 28 seconds had elapsed. By the time the Prof's team reached the scene 30 seconds had gone by. Arnoux was out of his car, his helmet off and safe in the back of the first car, having been checked for basics. He appeared fine. The ambulance — the secondary vehicle — had already arrived and Mario Arnoux was taken immediately to the Medical Centre from impact examination at the Centre for a full check of all functions, the time taken was just 4 minutes and 8 seconds.

He was unharmed and re-appeared in



Facing page

Top: Race control — the nerve centre of a Grand Prix. Control towers are in direct contact with pit and race cars.

Below: The medical centre at the entrance to the pit lane. The medical centre is a mini-hospital with four beds, an intensive care ward, an X-ray room and an operating theatre.

Top: The Emergency Ward at the Imola circuit. (John Townsend)

Below: 10 minutes before the start. Professor Watkins and Mario Casoni.

vs spare tyre, or before the end of the session.

There is no better rehearsal than the real thing. Sid had remarked. Mario Casoni felt he could have been quicker. Sid Watkins had not disagreed.

In drama Prof Watkins had been driven by Wilson Fittipaldi, former F1 pilot. By Wilson Fittipaldi, former F1 pilot. To gain the special experience needed to be such a driver was suggested that Mr F should take his medical car round behind the saloon car race. The Clerk of the Course agreed. By the first corner Wilson was up to 16th place out of 34. By the end of lap 1 he was in front. The Brazilian crowd, who had never seen a medical car, take the lead in a race before went wild. The Clerk of the Course was not amused. "I just did what you told me," said Fittipaldi — "you asked me to do what I normally do when I drive Professor Watkins so I did."

Nelson Piquet wasn't very amused when I told him he couldn't drive after his practice shunt here two years ago. He was even less so when I told him the reason. He turned up in racing overalls saying that he hadn't been concussed, had all his faculties and should race. So I asked him why he had forgotten to put on one of his racing boots? "Concussion is dangerous because it's unpredictable" — he added at last.

When Gerhard Berger had his practice shunt at virtually the same spot as Arnoux there was momentary confusion before the Watkins car was released. Later in a simple post-mortem the rules were re-defined by official race boss FISA's Roland Bruynseraede with the forceful consent of Club Steward John Cornish — the moment the red flag is out the medical cars go irrespective of whether the cause of the stoppage involves a driver's safety. Berger too was declared fit.





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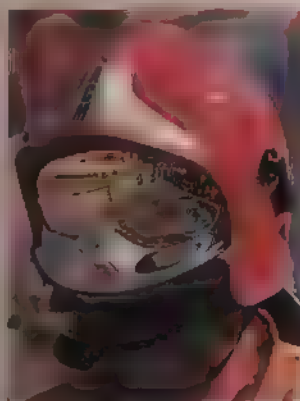
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This superb picture first appeared in Volume 1 of Murray Walker's Grand Prix Year. In response to public demand a limited number of posters have been produced. Size 24" x 16 1/2". Packed in tube. Available only through this advertisement.

Roland Bruynseraede is like Sid Watkins, persuasively powerful. He is also a decision maker. Within the control tower is a room containing a bank of TV monitors which enables Race Controllers to see every part of the Circuit at all times. Manned by keen and practised eyes each screen is studied assiduously. In the case of René Arnoux's shunt Mr Bruynseraede had made the decision to halt proceedings almost before the car had stopped. "He hit the barrier very hard — why take a chance?" Like all recipients of good decisions this directness is of critical relevance to the medical services and to Sid Watkins in particular. "Roland and I work well together. We both have the same interests at heart and I know he listens to what I have to say. The feelings seemed to be mutual. Why then had Professor Watkins, Roland Bruynseraede (and before him Derek Ongaro) and other senior officials of FISA's Medical and Safety Committees had to work so hard to enforce their views and why weren't all circuits mandated to provide 'total' medical safety services?"

"All circuits are rated for the services they supply — at the end of each race I have to complete a document which marks each aspect of every Grand Prix's medical services — it is comprehensive. Circuits which constantly fail in some areas could lose their Grand Prix status. This fact alone usually ensures that improvements are made. But it is really up to everyone involved to lobby for the services they want. Despite a specific request from FISA only three drivers had inspected the Imola Medical Centre by the end of the Friday session. Ayrton Senna, of his own volition, and Alain Prost who had been 'left on' by Professor Watkins, did make a tour on race day. Senna left quickly. Alain Prost was asked what he thought of the services.

"I think this is the best we can have at a race track and would like to think we could have this at every circuit. I will try to visit the Medical Centre at each race from now on."

It is perhaps hard to take too seriously the 'demands' of drivers concerning safety and medical care if the bulk of them do not know what is done. At Imola there were a few drivers who did come to look, which in an ironic way made the Messrs Watkins and Bruynseraede point more telling, if the drivers can't be bothered.



The final check at Imola was The Maggiore Hospital, one of the six hospitals which could be used if needed. It too was impressively organized with beds put aside specifically for GP drivers. It was hoped they would not be needed.

Sid Watkins was at all times calm through all proceedings. "Biggest problem for me can be boredom — I might go to sleep" (A careful scrutiny did in fact reveal that absolutely nothing in the race, or for that matter in the practice sessions had been missed by FISA's Medical Supremo.....)

On race day Dr Federico Baccarini did admit to some tension. Not so the Professor.



A book written by Professor Watkins in which he relates some of his more amusing experiences in Grand Prix medical racing will be published later in the year. Provisionally entitled Doctor Watkins' G.P. Casebook, it will be published by First Formula Publishing.

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# LIGIER'S INTERNATIONAL BLEND



JOHNNY RIVES

...and of all...

...with not a single point in 16 races. Can changes all round revive French fortunes? Johnny Rives of France's world famous newspaper *L'Equipe* sees signs of hope.

The track was wet. It had rained till late into the previous night. "No real problem," said Olivier Grouillard. "All we want to do is keep the cars at constant speeds on the straight."

Miss... impossible... once again the Ligier team was up against telemetric equipment that would not work on a Formula One car. It was taken off to be sent back to its maker in the United States. What to do next? An important piece of the Ligier's bodywork, the engine cover, had been redesigned, lowered considerably in relation to the one used for the Brazilian Grand Prix. Should they do a back to back test?

With the track still wet, no such comparison could be made, so the decision was taken to work on the

Penske style suspension, the point being to accustom engineer Anderson to the technical demands of Formula One which are rather different from the ones he knew in Indycar racing.

The 1989 Ligier JS33 has a hydraulic system which is the brainchild of former Penske engineer Ken Anderson, a young tubby American who has taken himself off to France to answer Guy Ligier's call. The French constructor has done a lot of recruiting beyond the national frontiers in the bid to revive his racing team. As Ligier's Formula One section was moving from Vichy to Magny Cours, beside a track that has been magnificently rebuilt, so too there was an enormous shake up in the Ligier personnel. Many of the mechanics gave up Formula One rather than transplant their families from Vichy to Nevers (60 miles!), and the result has been the rejuvenation of the workforce by the hiring of new hands.

Where the technical staff are concerned, Michel Beaugon is the only one to have stayed on in the wake of the resignations of Michel Tatu and Claude Galopin in early summer 1988. Ligier at that stage was offering jobs right, left and centre. Net result: Andy Willard left McLaren to take over research and development. And Ken Anderson, who had created that original Penske suspension system, crossed the Atlantic to set up on the old Continent — not just a move down the road from Vichy to Nevers, but for Anderson a major change of scenery.







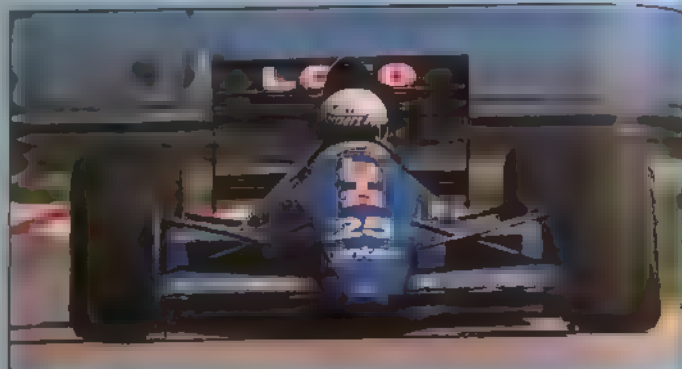
South Western accent. He has a good face, too — a quiet, lived-in look behind that extraordinary nose.

In February Grouillard had told me quite openly: 'Ligier is looking for a new spirit from me: a new dynamism. Maybe my very naivete will help some things alone. Alongside Arnoux, I think I can be a useful complement to the Ligier team.' The JS33 had not yet seen the light of day, speaking about the car to come the Toulouse driver wisely opined: 'No way of telling whether the JS33 will be competitive or not — even if it looks good. And even if a lot of enthusiasm has gone into the building of it. In theory we have at least as much potential as Arrows, Dallara, Minardi, Tyrrell and others: it's up to us to put ourselves at the front of that group of Ford Cosworth users.'

Now the car has raced we can say a little more about the virtues and defects of the JS33. Conventional in design, and healthy enough looking, the car with its generous and rather bulbous shape is surprising when seen beside such daring creations as the Arrows or the ZakSpeed. There was one handicap in Brazil: the car hadn't turned a wheel before the Jacarepagua challenge. The consequence was that one of them, Arnoux's, failed to qualify. Grouillard surprised us all by adapting so quickly and in the race his solid effort was rewarded with ninth place. He had achieved his aim of getting to the finish of his first Grand Prix, 'to thank the designers and the mechanics for the huge amount of work they had put in over the winter.'

How did he analyse the result? 'I was always on the defensive. Making my debut on such an impressive circuit, I wanted to prove I could take things carefully. The fact that I was using Arnoux's car (mine had electrical problems) only served to make me all the more cautious. Taking the car's potential into account, I would say I lost about 40 seconds over the race. If I had driven as I did last year in Formula 3000, the car was good enough to challenge Palmer for 7th place.'

In France, after the dreadful season the blue cars had in 1988, the general public was inclined to see 9th place for Ligier in Brazil as a pretty good result. But that is not how Guy Ligier saw it! 'For Grouillard, yes. For his Formula 1 debut he put up a very good performance on a different track, and he deserves full praise. I have to be harder on our car, judging by its showing in Rio it may not qualify in Imola. Alright, it was the first time the car had turned a wheel. It was probably a long way short of what it can really do.'



...the car was better than any one else's. But his car's future depends on how the team is doing. The team is doing well, but it's not clear if the car is competitive enough to win. The team is doing well, but it's not clear if the car is competitive enough to win. The team is doing well, but it's not clear if the car is competitive enough to win.

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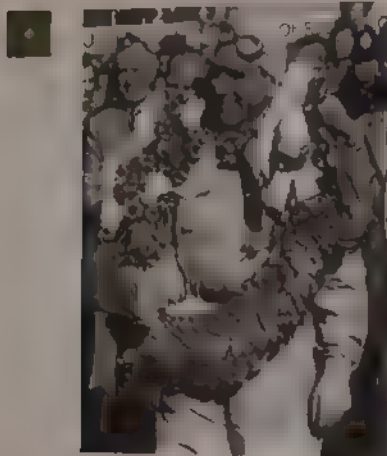
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## THE WORLD CHAMPIONS

### Part Two

# CICCIO AND NINO: THE CAR DEALER AND THE CAVALRY MAN



BY STUART SYKES

Winning smile: Giuseppe Farina (top) just won the first World Championship GP

the Italian Grand Prix was he champion of the world. Monza is one of the short racing, not only for the Italian but for all those who love the metaphor is particularly apt, for he was a deeply religious man. Prayer, he would later say, was the ultimate factor in his historic day, when only victory over time could be enough to give him the belief in miracles", he said after the race. "For with only a few laps to go, with Fangio already out of the race, I was leading when my oil gauge began to act peculiarly. I prayed to the Madonna, accelerated to maximum speed as fast as I could and kept putting it into neutral. I won the race — but next day nobody could restart that engine."

Only one more win would follow for Alfa Romeo, in Belgium the following year, before the Doctor moved on to join Ascari, Villorosi and Taruffi in a formidable Ferrari quartet. In 1951 Ferrari had fulfilled one ambition when his 4.5-litre car in Gonzalez' hands beat the Alfa-Romeos in the British Grand Prix. Alfa-Romeo, in fact, had withdrawn from the sport. To encourage competition for Ferrari, the governing body promoted Formula 2 - 2 litres unblown or 500cc with supercharging - to the status of Formula 1. Had Farina known it, the rising star of Ascari was about to eclipse all the Doctor had achieved. In 1952 Farina won not a single Grand Prix, in 1953 he took the chequered flag ahead of the field just once, in Germany. While Ferraris were sweeping all before them, Nino could win only that one Grand Prix for the Commendatore, though he did finish second and third in the World Championship in those two "F2" years.



Winning smile: Nino Farina (top) just won the first World Championship GP



Another Italian puts up a fight for the Prancing Horse: Nino Farina (top) just won the first World Championship GP

Anyone who thought the combination of Nigel Mansell and Ferrari was like Agip and water was stunned by the Englishman's brilliant victory in Brazil. An odd other thought, it prompted the reflection that the departure of Michele Alboreto was just the latest twist in a fairly sorry tale where Italian drivers and the "Italian national team" are concerned. This the second of our regular 1989 series on the World Champions looks back at the only two Italians to have taken that coveted title: Giuseppe Farina, the first World Champion of them all, and the legendary Alberto Ascari.

As with our first feature on Hawthorn and Hill, there are surprising coincidences between these two Italian drivers, not least that they scored their last World Championship Grand Prix wins in successive races in 1953, or that Monaco

played a dramatic part in the career of each. At the first ever Monaco Grand Prix to count towards the newly created Championship in 1950, Ascari was one of the few to escape the carnage when Farina's leading Alfa Romeo skidded on sea water near the Tabac and Ascari went on to claim second place in his maiden World Championship race. Born in 1906, Giuseppe was in the world of cars from his earliest years. His father and uncle Nino went into business together, creating what would become the equally legendary coachbuilding and styling firm at Puntarina. Giuseppe first tasted racing by his uncle's side at the age of 19, but cars took second place for a while as horsepower of a different kind intervened. Giuseppe Farina became a cavalry officer, moved on to a tank detachment, and still found time to secure a doctorate in law before the call

of motor racing became too strong. He would always appear in official results as Dr. G. Farina, though to those who knew him best he was always known as "Nino". Italian champion by 1938 and a protégé of the great Tazio Nuvolari, Farina spent his first two seasons in the World Championship with the all-conquering Alfa-Romeo team, whose dominance Enzo Ferrari was determined to end. When the World Championship began, however, Farina signalled his intentions with a Silverstone victory by just over two and a half seconds from teammate Juan Manuel Fangio. These, after all, were the days of the "Three F's": Farina, Fangio and Fagioli, the Alfa-Romeo trio who shared the front row on that Northampton day with Britain's Reg Parnell... In another Alfa-Romeo Farina secured three victories in that seven-race opening season, but not until the teams reached Monza to

the Italian Grand Prix was he champion of the world. Monza is one of the short racing, not only for the Italian but for all those who love the metaphor is particularly apt, for he was a deeply religious man. Prayer, he would later say, was the ultimate factor in his historic day, when only victory over time could be enough to give him the belief in miracles", he said after the race. "For with only a few laps to go, with Fangio already out of the race, I was leading when my oil gauge began to act peculiarly. I prayed to the Madonna, accelerated to maximum speed as fast as I could and kept putting it into neutral. I won the race — but next day nobody could restart that engine."

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Farina left, Ascari (second right) — and (center) a youthful Simeone Moss

FLAT

allowed to touch them. This serves to make the circumstances of the stranger and sad death the happened, he had race for Ferrari. The man he second place? Dr Farina, at Bremgarten circuit in 1955 had fought out an epic duel the previous year. Ascari from a last minute pit stop beat his arch rival on the track. Ascari's last success came on 25rd, three weeks earlier at the Nurburgring. Farina had been late. Just a Grand Prix winner for the final time. Ascari parted company with Ferrari in 1954 — Maranello politics being one of the few constants in Formula One — and cooled his heels for a while as a new Lancia was developed, though pole position in Spain was the last of 14 in his career, and the only one not in a Ferrari. The start of 1955 was promising enough until Monaco. The retirements of Fangio and Moss had left him in the lead, but whether the adrenalin flowed too strongly or something broke on the car, Ascari and his Lancia crashed at the chicane on the seafront and ended up in the harbour — just at the spot where he had touched wood the previous evening.

He escaped relatively unscathed, stayed in Monaco for two days and went home on the Wednesday Thursday May 26th found Alberto Ascari at Monza, where Castellotti and others were testing for Ferrari prior to a minor race on the Sunday. To everyone's surprise, Ascari asked to have a run, to see if the stiffness had left him after his accident. To his friend Villorelli's horror, Ascari borrowed helmet and goggles from Castellotti himself. Ascari, who would never be parted from that light blue helmet which was having its chin strap repaired after his Monaco plunge. Two laps were enough, something borrowed, something blew. The car crashed inexplicably, and Alberto Ascari was dead. At 36, the same age as his father was thirty years earlier that fateful day at Montlhéry. The circumstances of his death add poignancy to the legend of Alberto Ascari, but he had achieved something no Italian has done since that date won the World Championship in a Ferrari. Only sixteen Italians have been Ferrari Grand Prix drivers; only eight of them have won races, only three have won more than one. Italians in Ferrari's have won 26, so Ascari's victories account for fifty per cent of the total Ferrari haul and Farina's almost another fifth. Michele Alboreto, the most recent Maranello departure won three races for Ferrari, but none since 1985, and since Ascari in 1953, no other Italian has ever been champion of the world. That, in a sport where statistics abound, is perhaps the strangest of all. □



Primitive pit house left, a typical 1955

LAT



Use of the new flagstone seen here at Syracuse was once

LAT

bloods of the day, not least his teammate Alberto Ascari. Seeking to finish off with a flourish, Farina went to Indianapolis — then a World Championship event — in 1956... and failed to qualify. The shadow cast over him by Ascari would, as we shall see, extend across the Atlantic too.

If Farina was born into an automobile environment, Alberto Ascari had racing in his blood. Was not his father the incomparable Antonio — former racing teammate of Enzo Ferrari himself. Antonio after whom the Ascari Circuit was named at Montlhéry — the circuit where he lost his life in 1925? Alberto's own passion for speed was developed on motor cycles, and in 1940 he took part in the celebrated Mille Miglia road race endurance test. With the intervention of war and fatherhood, however, Alberto settled to the life of a respected car dealer, the occupation he would later list on a questionnaire on his entry to the United States.

In 1947 however, he too succumbed to the lure of motor racing — in Egypt, of all places. Italian compatriot Piero Dusio's appeal for a "mass-produced" racing-car had led to the creation of the Cisitalia, a whole fleet of which were shipped to Egypt for the international Grand Prix. Finishing second was enough for Ascari — the racing heritage was

strong in his veins, and his friendship with another great driver, Luigi Villorelli, did nothing to deter him.

Ascari bought a Maserati 1500 — from Villorelli — and went racing in secret. The cover was blown, however, when he was the only man to hound the Alfa 158s, in the hands of such giants as Varzi and Trossi, at the Fiera circuit near Milan, and he began racing in earnest for Maserati in 1948. A year later Ascari was a Ferrari driver, his first victory for the marque coming at Bari, where an adoring crowd also coined the unusual nickname "Ciccio" or "Tubby".

His debut in the World Championship came at Monaco as we saw, but he had to wait until July of 1951 for his maiden victory at the fearsome Nurburgring, taking the flag by half a minute from Fangio's Alfa Romeo. He hated to see wheels around him — was how Enzo Ferrari summed up Antonio's son. Whenever he could Alberto would start like a rocket and dominate the opposition from the front. He was not the fighter I would have liked him to be — added the Commendatore — but Ascari did well enough for the Prancing Horse all 13 of his World Championship victories were for that marque, two at Monza, the team's spiritual home. Runner up in the title chase in 1951 he took the World Championship for the next two

years running. In fact it would be better to say he walked away with it: six consecutive victories in 1952, five more wins in 1953 — fat chance of catching Ciccio.

In a sense he tuned his arrival at the top of the racing ladder to perfection. When the up-grading of Formula Two was announced, Ferrari asked his famous engineer Aurelio Lampredi to design a four-cylinder engine to do the job. The unit was conceived, drawn and built within four months, in plenty of time for Ascari to rout all-comers. Nor was the great 4.5-litre Ferrari rendered obsolete for here is another coincidence between the fortunes of Farina and Ascari. In 1952 Ascari decided to lay siege to the American fortress of Indianapolis. With limited back-up and a single engine at his disposal, he qualified comfortably — unlike Farina a few years later — and was running strongly enough, he felt, to go on and win the race when a wheel hub broke and pitched him on to the infield. "It was a Friday", a resigned Ascari would say, "so it ended up badly..."

Ciccio was, indeed, a deeply superstitious man, one who would make Stefano Modena's curious little rituals pale into insignificance. The pale blue helmet, gloves and other items of driving paraphernalia would always be packed in the same order and place, no-one else



# TURBO TO ATMIO



DAVID TREMAYNE

The turbocharged era of Grand Prix racing - particularly the years from 1983 to 1986 - will go down in history as a Golden Age of motorsport. It was a time when power outputs rocketed from 650bhp to 1300 in qualifying trim, when the racing engine was persuaded to produce up to a staggering 870bhp per litre. In 1966, with the introduction of the 3 litre formula which the turbos eventually supplanted, 150bhp per litre had been deemed optimistic. Looking back, it is sometimes easy to forget the derision with which the initial Renault turbo was met when it made its debut at Silverstone in 1977. The Formula One regulations at that time allowed 3 litre engines and 1½ litre supercharged but nobody apart from Renault gave much serious thought to anything but the former, the French company having experimented with the concept for two years already prior to

that first race. The expression normally ascribed to indicate that the engine inhaled air at the standard atmospheric pressure of 14.7psi (one bar) had yet to become common. In 1977 the Cosworth DFV still ruled the roost, although the Ferrari and Alfa Romeo Flat 12s had their moments and using the former's reliability Niki Lauda won the World Championship. The power ante in those days was around 360 to 470bhp, but even then Renault boasted some 25bhp more. More than anything else, the Regle wanted to win Le Mans and Francois Castaing had designed a 2 litre engine primarily for sportscar racing and Formula Two use. It was then turbocharged by Bernard Dudot and when Renault Chief Executive Bernard Hanon gave the go-ahead to begin a design study for Formula One this unit was reduced to 1500cc and installed in a

makeshift Alpine derived testbed chassis. Testing was carried out during 1976 and they learned a lot about temperature control, fuel injection and boost regulation. Renault was to discover, however, that its sheer power was not the be all and end all in Formula One. Its original turbo engine had appalling delays in throttle response and a very narrow power band, and was grossly unreliable too. On the RS01's debut in the 1977 British Grand Prix at Silverstone, where the wide sweeps of the circuit were expected to flatter the engine's characteristics, Jean Pierre Jabouille qualified only 21st and retired early when the induction manifold cracked. As his 2.7 bar boost became 1 bar it was left to battle the 3 litre cars with what was effectively simply a 1½ litre power unit. As Renault struggled through to the end

of that season, and retired in race in 1978, its rivals sniggered and carried on with their trusted engines while trying the mysteries of ground effect. Finally finished a race at Monza he was 10th, but it wasn't until the Grand Prix at Watkins Glen at the end of the year that he finally won three championship points for Renault. With no other turbo manufacturers on the scene, technical progress was relatively slow by the standards that would come in later years. By 1979 the V6 was producing over 530bhp, and then came the breakthrough and Jabouille's historic victory in the French Grand Prix at Dijon. There were no further successes that year, but

as rivals began to register the straightline speeds that the Renaults were posting the writing began to appear on the Formula One wall: the only thing that was holding the Renaults back was their chassis technology. The turbo engine was there to stay.

As Renault progressed to a very healthy 550bhp at 10,500rpm by 1980, Ferrari and BMW began working on their own turbos while Brian Hart began considering a blown version of his Formula Two four cylinder.

By 1982 a normally aspirated victory was becoming unusual, but it took until 1983 for the death knell finally to sound for the 3 litre powerplant. Then, Michele Alboreto's victory round the streets of Detroit was to mark the last win for a normally aspirated Grand Prix car until Nigel Mansell's Ferrari took the chequered flag in Rio six years later.

To the pursists the idea of turbocharged engines and their 'screwdriver' tuning was anathema. Somehow, turning up the boost to produce greater power seemed like cheating, in engineering terms. What it really did, however, was to force the pace of race engine development in a manner that was more akin to the Nazi financed battles between Mercedes-Benz and Auto Union in the Thirties, except that this time it wasn't one propaganda hunting government that was providing the bankroll for unlimited advance, but a series of major car manufacturers bent on exploiting the marketing advantages of Formula One. Their quest was to produce one of the greatest eras of Grand Prix racing.

As more manufacturers began producing



Piquet France 85 Brabham's last turbo triumph

Boost levels were creeping to 3.5 bar for qualifying and suddenly power outputs of 650 to 700bhp were the norm. That year flat bottom chassis regulations had replaced ground effect, but it wouldn't be long before power increases far out weighed any reduction in cornering forces, and lap times would continue their downward spiral. This suited all but the remaining normally aspirated cars. As turbo power soared towards the 1000bhp mark, designers could afford to run larger and larger wings to restore the lost undercar downforce. The atmosphere, by contrast, made little progress on the power front. From 475bhp in 1977 power had risen to little more than 520bhp in 1983 with the advent of the short stroke Cosworth DFV. FISA eyed the developments with alarm

upwards. There was plenty of power at the lower temperature but economy naturally suffered and he could adjust this balance up to the highest temperature, at which power would be reduced but economy be enhanced. When he wanted an extra spur to pass anyone, or to keep a rival at bay all the driver had to do was switch to the coldest setting, provided he didn't stay on it for long, and paid back his fuel reserves later. That was precisely the plan. Nelson Piquet was obliged to use against the normally aspirated Benetton of Sandro Nannini and Thierry Boutsen and Riccardo Patrese's Williams as he raced for third place at Imola last year. A driver of Ayrton Senna's calibre for example, could tell Honda's engineers exactly how his car behaved during a



even further it has upped the ante in the development of engines and will be a major advantage with all its permutations.

The massive power increase of the 1983 to 1986 period brought about unprecedented engine development, the fruits of which will still be felt in the new also years. Materials technology has been enhanced, and we are now on the threshold of using ceramics in racing engines. Furthermore, the progress made in the technology of managing an engine's variables will be of continuous value not only in maximising its power

but also in reducing its fuel consumption. And, however, there will be greater emphasis on the use of turbochargers and on the use of more efficient fuel systems. And, finally, the use of more efficient fuel systems will be a major development in the near future.

It will become much harder to extract more power in a quantum leap than an unblown Formula One engine, now that its breathing is not artificially affected, and observers fervently hope this will lead to closer racing while reducing the likelihood of any one marque dominating

in quite the same way as McLaren towards turbo era. Now increased from making an engine increased boost promoting better breathing numerous exploration cylinder and by achieving Besides the fantastic sort breed of atmospheric Ferrari and Chrysler and the Honda and Ren

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other encouraging aspect of the new formula is the continued interest from major manufacturers. Far from jumping off the bandwagon with the death of the turbos, they are still as keen as ever to involve themselves in what is now a highly expensive marketing exercise. FIA rather optimistically reels off a string of manufacturers said to be interested in building Formula One engines, and certainly the plan to rationalise Formula One and the Sports Prototype World Championship around 3.5 litre displacement unblown engines has played a major role in that. (Currently Honda, Ferrari, Renault, Ford (Covworths old and new), Judd, Chrysler, Lamborghini

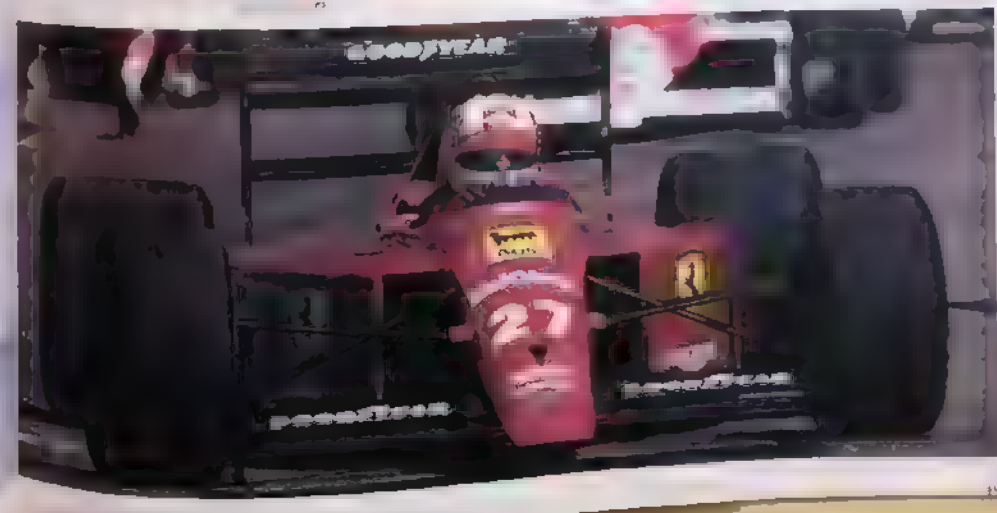


Above: Shortlived lap by new chassis as Lamborghini at mid-season 'twins' (left) and Yamaha — not yet an unqualified success (left) (see Lotus-Judd didn't win straight out of the box (Alonso Vandystadt)

and Yamaha are already in the arena, while Life, MGN, Neotech, Subaru, Mercedes Benz, BMW, Alfa Romeo, Peugeot, Nissan, Toyota and Porsche are said to be waiting in the wings. Even if only half of them take the plunge, Formula One can expect a wide variety of powerplants within the next five years, and that can only be good news for an increasingly expensive sport.

When the 3 litre formula came back in 1966, engine design dictated chassis dimensions. Now the wheel has come full circle. More often than not, chassis criteria such as overall packaging and the prime requirement of a narrow cross-section, dictate the type of engine. Thus few believe that the Life and MGN V12s, or Subaru's Flat-12 will ever see the light of a racing day in an era in which even a traditional 90 degree vee angle is now regarded as excessively wide.

Although fuel capacity restrictions have now been lifted, economy will continue to be of paramount importance. In the turbo era petrochemical manufacturers came up with special dense fuels to help in the fight against detonation, but though atom fuel will weigh less, it is still important for cars to be as light as possible and nobody wants to go to the start line carrying anything more than the absolute minimum necessary to make it to the chequered flag at full racing



Every chassis designer is now riding a high tide of optimism. The prospect of seeing greater power with less cars is a very real one. At any time since the very early 1970s, when the turbo engine has been the last of the creative chassis engineers. The turbocharged v12 engine was an extraordinary device, whose we probably won't see again, but from the perspective of power the new breed of engine powerplants should be significantly better, even if they don't quite possess that sheer tyre-distorting rubber laying punch and the bone-rattling unburnt hydrocarbons that signalled Nelson Piquet had embarked on a blistering qualifying lap in the 1400bhp Brabham BT54. ■



# OUTSIDE LOOKING IN

# MARTIN DONNELLY TRAVELLIN' MAN.....



ANDY SMITH

In motor racing — you must have noticed — all Italian drivers are dark and exciting (or should that be excitable). The English are 'determined and phlegmatic', the Irish 'quietly laconic'. Martin Donnelly — the 25 year old Ulsterman presently so much in demand by Formula One, Formula 3000 and Group C — is in the words of the old Irish football coach — 'more deceptive than he looks'. A seemingly laid back exterior conceals the fierce determination to succeed in his ambition to make Formula One. Donnelly's already sampled the heady cocktail of sun, dust, oppressive heat, blinding glare and grindingly hard work, ploughing endlessly around the Autodromo Nelson Piquet. He professes to enjoy it. "Remember that when I was setting off to test the Lotus in Rio the Formula Three guys were lining up on the grid at Thruxton. I'd done that, shivered in the cold and the wet of the pits and I've no regrets about not being there again". Donnelly's career last year was not so much progression as quantum leap. Formula Three to Formula 3000 with Eddie Jordan Racing and wins at Brands and Dijon impressed Lotus and virtually everyone else. Tom Walkinshaw took him to Daytona for the 24 hour race in

January — the beginning of a new and strange phase of Donnelly's life. "Seems like last year it was only January" Travel hadn't been a part of my lifestyle until then. I'd been on the local British Formula Three scene, the odd trip to Europe and Macau of course at the end of the season — but this year, since Daytona, it's been non stop. Go here go there drive this, do that". Daytona was the first experience Donnelly had close hand of the first class racing scene. I learned what a really professional outfit demands. My involvement with TWR — the best team in sports car racing was invaluable. There was a lot of tension around with Jaguar going for a double and pressure on me not to screw up. It was 85 degrees while we there, so we were told not to sit in the sun, there were no strict instructions about what we could eat, the whole atmosphere was different. Drivers like the Andrettis were around and the race was such a big thing with full TV coverage, it was a unique experience for me". It wasn't entirely a happy one though. Donnelly's teammate Derek Daly collided with the Nissan of fellow Irishman Michael Roe on the very first lap and shortly afterwards it was confirmed that Donnelly could sit back and watch and take the

opportunity to learn. The car was pushed back into the transporter. The opportunity for more races with Jaguar in the World Sportscar Series presented itself but came to nothing because of a sponsorship problem. Not the usual kind — a lack of sponsorship — but a conflict between sponsors. Sit Cut back Jaguar. Donnelly is with Camel. Noticing a 'window' or two in his schedule Donnelly organised himself a Japanese Formula 3000 drive to add to his European Formula 3000 programme, Lotus Formula One testing and a commitment to Nissan to test and drive at Le Mans. "Even without Nissan I feel I've over-stretched myself. I certainly can't take any more on, I'm starting to feel like a foreigner. I don't live in the country, I'm always on a plane somewhere. Airline tickets to arrive at home with a message — be on this plane from that airport and I just go. I went with Lotus to Rio testing for five days, flew back from Rio via Heathrow to Jerez for three days Formula 3000 testing, then back from Jerez to Rio via Madrid to be on Formula One standby. When I came back to England it was more Formula 3000 tests". Far from looking jaded by the jetting across the Atlantic, Donnelly, on a typically grey Silverstone day with the wind howling across the paddock

from somewhere Dadford way, looked content enough with his lot though. "I admit I don't really feel in control of my life at present! The problem is that at this stage of the season everyone has a new car and they all want them testing on the same day. Home life is non-existent. My fiancée Diane is suffering most. I arrive back from some-where or other, throw in one set of washing, pick up a clean lot and head off again. I keep promising her it'll be better soon." The Donnelly home is a semi-detached in the village of Attleborough in Norfolk. "Nothing special — and no I'm not in Norfolk just to be within range of Peter Warr at contract time! In fact I settled there when I first came to England in 1984. I've always got on well in Norfolk. It's one pace behind the rest of the country, people have time for you and it's difficult to get to which means Eddie can't get hold of me at short notice — that's a bonus". Manager Eddie Jordan has been the catalyst in Donnelly's career. He is confident, friend and advisor. "I owe him a lot. Other people can't understand his accent and say 'yes' before they know what they're agreeing to. I don't have that problem". At the Racing Car Show at London's Olympia in January, Lotus announced that Donnelly would be their test driver for the 1989 Formula One season and reserve should any mishap befall either Nakajima or Piquet. Many observers expected Donnelly to be offered the number two seat. "That did appear to be a possibility for a while. Last October I was testing at Snetterton and Peter Warr phoned. I knew Lotus had been doing some checking on my background. Prior to the Japanese Grand Prix the second seat there appeared open — a week later Satoru was back in the picture and the best offer was a test contract."



About Piquet's London. Above: Team take it easy. Racing a sport.



"By that stage I was hardly in a position to pick and choose so I explained that I wanted to be a part of the team — involved totally, not just a test driver pounding around Snetterton twice a week and nobody ever hearing about what I was doing". Donnelly was emphatic on that point — he may derive some satisfaction from a good testing job, but it is winning races and recognition that he craves. "I don't want to become another Emanuele Pirro charging around a track all the time in Japan for McLaren and nobody ever hearing of him". Lotus guaranteed that would not happen — he would be included as an integral part of the team and if Piquet or Nakajima cannot race — he will. "I feel a very much part of the team already. It's a good team to be with. I think I get on well with everyone". Donnelly's Formula One debut almost occurred at Rio. Piquet, inspecting his new yacht in Viareggio harbour in February fell down a ladder and broke a rib.

Donnelly was in Japan and was told the news when he phoned home. "Diane had heard on the radio about Nelson's accident. I didn't believe her at first and no matter who I called for information nobody seemed to know much. When I got back I went straight from Heathrow to Lotus. Peter Warr told me Piquet had four weeks to recover and not to build my hopes up". In the event Piquet reported fit and Donnelly watched the race on TV. By then he knew every foot of the track having driven round it dozens of times. "Rio was just uncomfortable — the heat and humidity if you moved you sweated. The track is difficult and bumpy and there's no room in the cockpit. I'd come into the pits gasping for some fresh air. Then they'd take the engine cover off and the heat from the engine just blasted at you. My mouth felt like sandpaper and I'd feel sick". Donnelly persevered, helped by the fact that he had a few friends around him. Johnny Herbert — colleague and opponent

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from Formula Three was their first look the opportunity to h together in Rio a few times couple of laughs, it was in relax" Is Formula One as unfi is rumoured to be? "Not un wouldn't say so, just more everyone is more guarded al going on. I'm lucky compar who've made Formula One friends there already - Johnny Herbert, I was really please perform in Rio, other s... One I know well are guys like Agip and Moreno but it's much in to build up relationships in Formula One and even Formula 3000. I see people at the circuits and they're totally wrapped up in what their own team is doing. It's not like Formula Three where everyone lived and worked in the same country virtually"

One man who gave Donnelly a few welcome words of encouragement in Rio was the World Champion Ayrton Senna. "I've always had a great deal of respect for Ayrton going back to the days when I came to England in 1984 and was with the Van Diemen operation in Norfolk. Senna had been with them too and in Rio he stopped by our pit and had a chat. When I was racing in Ireland I would always check what Ayrton and Martin Brundle were up to in Formula Three

Nowadays I read everything I can about Formula One - every report, I want to know everything that's going on. As I've progressed through each Formula I've taken it step by step but I'm determined to take every opportunity that comes my way. Motor racing is a fashionable business and fashions change quickly. Ambition is a part of the Donnelly make up - not blatantly obvious but hardly obviously concealed either "Formula One is the pinnacle of a driver's career the cream. It's the most professional, the most experienced. Drivers are looked after they don't want for anything. I'm really impressed by the set ups and the organisations. I don't feel overawed. I just want to be a part. I've seen Johnny Herbert break through, now I want to succeed"

So how often will he actually be used by Lotus this season? "The Lotus deal and winning the European 3000 are top priorities, they go hand in hand. Later in the year I'll be very much involved with Lotus when they start work on the Tickford engine development (a five valve cylinder head) in mid season. Satoru and Nelson will be away racing in America then, I'll be putting in the miles in Europe"

By mid season perhaps things will have calmed down a little for the Irishman who is presently living life at such a hectic pace. Then again mid season coincides with Formula 3000 races and



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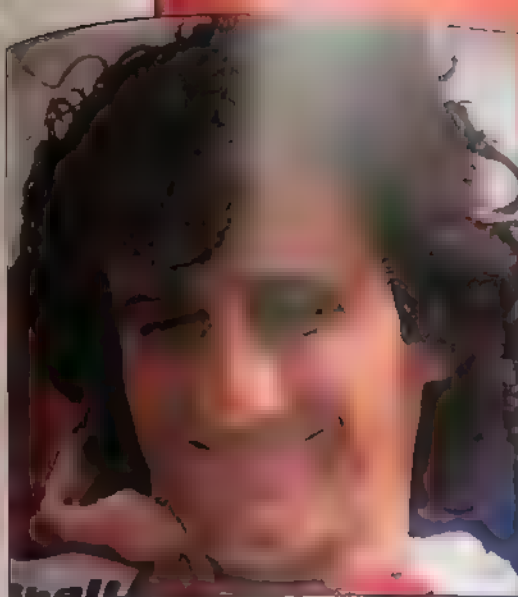
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## Looking Forward to 40

When Prost came whistling past the chequered flag at Estoril in 1987 to score a record 28th career Grand Prix win his glittering talent was graciously acknowledged by the man whose 13 year record of 27 wins had just been overturned Jackie Stewart remarked admiringly 'if my record had to fall, there's nobody I would have been happier to exceed it than Alain. To me he's the most complete driver out there today.' The Scot then added, 'I think Alain is quite capable of pushing that record to around 40 wins before he retires.'

To many people, that seemed an optimistic prediction at the time. But another twelve Grand Prix wins before he stops. Just over a year after his other seven wins under Alan Jones, Jackie's prediction doesn't look quite as imaginative any longer. In fact, it is the potential of the naturally aspirated 1.6-litre McLaren-Honda, the Professor's, to quite easily be home and in his career victories by the end of his season. Certainly, the man is out to prove it.

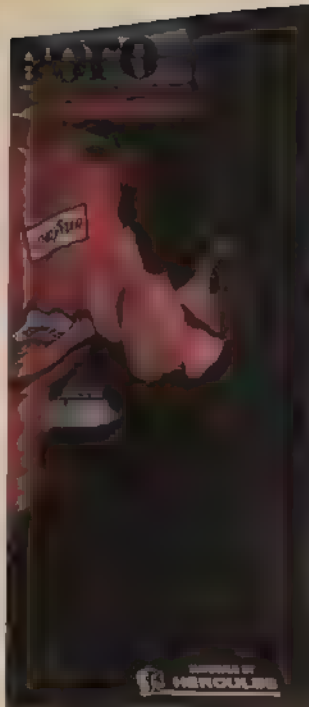
as a pain for those who've spent the past months watching these companies say they hope to end the war in Iraq. And after the election, it's clear that the same old, same old has set in. The first order of business for the new administration will be to get off the hook for much of the drudge Alan, along with the secret of Enimonic's Puro, the de facto share of that early testing in the 3.5 litre car. Although by the end of the 1970s, the driver's problems with the 1000cc had been virtually eliminated, it was by comparison with the 1000cc and the second gap between the 1000cc and the engine's response was a real characterised these engines in the early years. A 1000cc was something like atmospheric V10 was something like 1000cc on this score.

Where you notice the biggest difference is changing gear where you want to be more conscious of feeling in the power more de-latch, he explains. And when in some corners you find a big difference between the performance between the turbo and the atmospheric cars, in others it's about the same. At R1 I had a problem at low revs with my driving style; it felt as though I was back driving a turbo again. That was partly my technique I think and partly the fact that the engine's response needed

[illegible][illegible]

One of those friends, of course, remains Jacques Laffite, with whom he went into partnership to buy an interest in a 27 hole golf course near Dijon. Golf is his great passion away from his work.

"No, I will plan my retirement when the time comes," he says enigmatically. "More importantly, I want to have a very clear



However, he did not have a strategy like Kennedy. As early as 1961, he knew that he would lose. Williams, do not know and then call it a day. Such a structured plan is a question of keeping it in mind. I know exactly what I was going to do when I would say "I was going to do it."

One thing, however, seems certain. Al Prost is not a man to do anything halves. Aware of his status in the Formula One community, he has far too much self-respect to stay racing after his career has peaked. I suspect he will be one of those who turns his back on the sport whilst at the absolute zenith of his career. But, to judge by that seat at the place at Rio, not yet awhile.

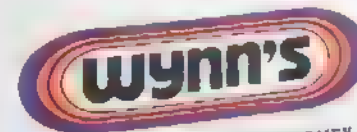
Left One giant to another (Darius) in cry of pain & in the 19th c. it is a common cry.



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# PIRELLI

## BACK TO THE FRONT

**P**irelli is back.

The Italian tyre maker pulled out of Grand Prix competition at the end of 1986, leaving Goodyear with a monopoly in Formula One. Now in 1989 the yellow and red Pirelli transporters will once again be alongside Goodyear's blue and white transporters in the paddock. Why is Pirelli back? "For two reasons," Dario Calzavara, director of Motor Sport for the Pirelli Group, said in an interview with Prix Editions at the Brazilian Grand Prix. "The first one is that Formula One is a motor sport activity that's also an incredible promotional activity all over the world. It is the only motor racing that is very well known around the world. So that goes very well with our marketing plan. And secondly because the technological fabric of Formula One is really very important for the normal production."

Why then did Pirelli pull out of Formula One for two years? "We decided at the end of 1986 to stop Formula One because we had a very important period of reorganization of all our production facilities in Milan where Pirelli is based," Calzavara says. "We decided it was more convenient to stop international activities. Now we judge that this program is almost finished and we are ready to begin again."

**PIRELLI'S RACE HISTORY**  
Pirelli has a race history that stretches back to the earliest days of the automobile. On March 26th, 1889, Pirelli made its first sale: a pair of tires for a Peugeot. That same day, halfway around the world, a commemorative run of the 1907 Peking to Paris race was scheduled to start in Peking. The original winning car, an Alfa Romeo, which has been restored by Fiat, will make the run again 82 years after it did in 1907.

In 1907, Prince S. Borghese, journalist Luigi Barzini and mechanic Ettore Guizzardi drove the "4 litre Italia" over the 16,000km route. Five teams in all took part in the Peking to Paris race, and the Alfa team won by a margin of three weeks. The Alfa was equipped with Pirelli tyres.

Pirelli's first Grand Prix win came in 1913 when Georges Boillot drove his 5.6 litre Peugeot to victory in the Grand Prix of France at Amiens. Boillot sent a photo of himself sitting in the Peugeot to Pirelli headquarters in Milan. He signed it and wrote: "To a victory made possible by the extraordinary quality of Pirelli tyres."

That was the first of 92 Grand Prix victories for Pirelli. The first of four Formula One championships for Pirelli came in 1925 with the Alfa Romeo and drivers Gastone Brilli Perri, Giuseppe Campari and Antonio Ascari.

Pirelli's glory days in Formula One began with the modern Grand Prix era in 1950. In those times the Italian team — Maserati, Alfa Romeo, Ferrari — was supreme. And they all used Pirelli. In 1950 Giuseppe "Nino" Farina won the world championship driving a Maserati shod Alfa Romeo 158. Farina won the first race in 1950 — the British Grand Prix — and started a 30 Grand Prix streak for Pirelli that would last until 1954.

The streak, incidentally, does not include the Indianapolis 500 which, until 1960, counted as part of the Formula One world championship. At the Brickyard in those days the winners ran on Firestones.

In its glory days Pirelli was associated with the most famous names of sport. Alberto Ascari won the 1952 and 1953 world championships in a Ferrari. Juan Manuel Fangio won the title in an Alfa Romeo and the championship in a Maserati. Pirelli's streak ended in 1954. Fangio won two races in his Pirelli-shod

Maserati before switching to the Mercedes-Benz team and Continental tyres. He won four Grands Prix for Mercedes that season and the world championship. In 1956 Pirelli pulled out of Grand Prix racing. Not until 1981 would it return to the Formula One arena.

In 1957, however, Fangio used left over Pirelli tyres on his Maserati and won his fifth world championship. During those golden years Pirelli was winning outside the Formula One world. From 1913 to 1957 Pirelli-shod cars won major races everywhere: 18 of the 100 Mig. 4 classics, 19 Targa Florio, one Le Mans 24 Hours in 1949 and 1954, and a number of other races including events such as the Sebring 12 Hours, the 24 Hours of Le Mans, and the Spa 24 Hours.

From 1927 to 1957 Pirelli built two types of racing tyres — the Stella Bianca (White Star) and the Stella Nera (Black Star), which had a carcass of rubberised cotton cord. A tread pattern of low pentagonal blocks which were linked by rubber bridges to eliminate chunking at high speeds.

In the late 1940s and in the 1950s the Stella Bianca was almost unbeatable. It had a carcass of rubberised cotton which was changed to a nylon cord reinforcing



PIRELLI'S NEW TREAD PATTERNS: THE STELLA BIANCA (WHITE STAR) AND THE STELLA NERA (BLACK STAR). THE STELLA BIANCA WAS THE FIRST PIRELLI RACING TYRE TO BE EQUIPPED WITH A NYLON CORD REINFORCING.



material. Pirelli cut transverse grooves into the tread pattern to improve its grip in the rain.

Since the 1970s Pirelli's main successes have come in rallying. Through its relationship with Fiat and Lancia, Pirelli has won steadily in the rally world and its laurels include eight world manufacturer rally championships.

When Pirelli returned to Grand Prix competition in 1981 it struggled to compete with Michelin and Goodyear. Part of the problem was that Pirelli tyres could only be found on the teams that filled the back half of the grid.

That changed in 1985 when Bernie Ecclestone's Brabham team and Pirelli came together in a multi-million dollar deal. Over the winter of 1984/85 Brabham did some 12,000 miles of testing. Much of the testing was done on high-speed circuits in hot weather, and under these conditions the Pirelli tyres were competitive. Nelson Piquet won the French Grand Prix that year bringing Pirelli its first Grand Prix victory since Stirling Moss won the 1957 Italian Grand Prix in a Vanwall.

In the 1986 Mexican Grand Prix Gerhard Berger's strategy of running without a pitstop for tyres paid off. The Austrian won the race in his Pirelli-shod Benetton. It was Pirelli's 44th Grand Prix victory.

At the end of the 1986 season Pirelli pulled out of Formula One. Which brings us back to 1989

## BACK TO THE PRESENT

In 1989 Pirelli will supply tyres to the Brabham, Coloni, Dallara, EuroBrun Minardi, Osella and Zakspeed teams, a total of 13 cars.

How many tyres will Pirelli bring to a Grand Prix weekend? "About 800," Calzavara says. "We plan to have at every Grand Prix two race compounds, two rain compounds and one compound for qualifying. Maybe we will introduce a second qualifying compound because in qualifying we are not very competitive at the moment. Basically 50 percent of the total will be the two race compounds." Which of the Pirelli teams get free tyres? "This is private between us and the teams," Calzavara says. "I can say that Minardi has a special relationship with Pirelli because we started to test with Minardi. I think that if today generally speaking, we are competitive that thanks to the Minardi collaboration Pirelli's return to Formula One brought back the madness of qualifying tyres — the soft, sticky tyres which gave the car incredible grip for two or three laps. Because of the limited number of qualifying tyres available to each driver they take enormous risks on their last lap."

Calzavara quickly agrees that the qualifying tyre situation is a ludicrous one. "Nobody is happy about the qualifying tyres," he says. "Qualifying

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...one for the long

The importance of the motor racing Formula  
 One world championship is well known. It is a  
 sport which has always  
 been of great interest to the general public in Europe  
 and the United States. South America, Japan  
 and Australia have also





Berger flashed by and led teammate Michele Alboreto across the line for a Ferrari one-two sweep of the Italian Grand Prix. The victory, which set off a near-riot by the ecstatic "tifosi" fans, came four weeks to the day after Enzo Ferrari's death. Today Berger calls that win his most memorable racing experience. Instead of just one win in 1988, Berger could have had many. At the end of 1986 he turned down a McLaren offer and joined Ferrari instead.

Is he upset that he passed up McLaren for Ferrari? "No," Berger says. "I think I could have won a lot last year in the McLaren. But my decision was to go to Ferrari. I'm here and I'm happy here. I'd also be happy if I had gone to McLaren. So, it's no problem."

It's been said that Berger's fellow countryman Niki Lauda advised him to make the move to Ferrari. "No," Berger says. "It's not true. He never told me. I made my own decision, and you can say if I look at last year that I was wrong. You shouldn't look at things like this. You should be happy where you are."

Did three-time world champion Lauda play a major role in influencing his career? Again Berger says no. "He's just another driver and a good friend." One driver did, however, play a role in Berger's life. In 1982 a severe shortage of money caused Berger to consider giving up his fledgling racing career. Then he met former BRM driver Helmut Marko who helped the young Austrian find sponsorship to compete in the European Formula 3 championship. In 1984 Berger drove in Grand Prix competition for the first time. Several races with the ATS team brought him a sixth place finish in Italy and recognition of his talents by several teams who expressed an interest in him for 1985.

Then came Berger's serious road accident. He broke his neck yet had an incredible stroke of luck — the first car to stop on the scene contained a pair of German doctors who specialized in such injuries.

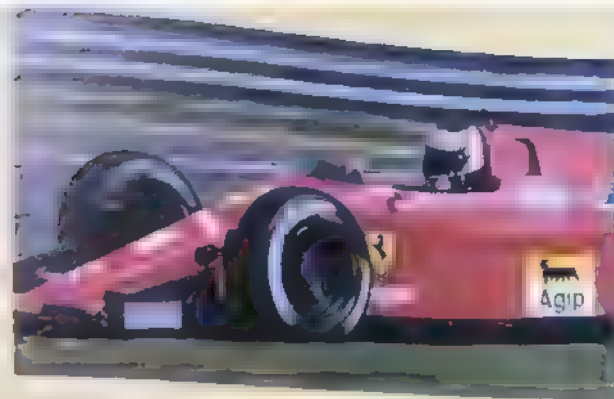
At the hospital the doctors told him that it would be months before he could walk again. The problem was that he had a testing date with Arrows in five weeks. He hobbled out of bed, kept the date and signed with Arrows in 1985. The team was not competitive. He joined Benetton in 1986, and at Mexico he scored his first Grand Prix victory.

Enzo Ferrari, watching Berger race on TV, said he had a "special feeling" about Berger, and so it was that Berger became a member of the Prancing Horse team from Maranello in 1987. Berger repaid Enzo's confidence that year with victories in Japan and Australia, ending Ferrari's 37 race losing streak.

How has the team changed following Enzo Ferrari's death? Not a lot, Berger



Left: What was a crossroad: Enzo Ferrari's death. Right: Berger's move to Ferrari.



Right: The style we all look forward to seeing. Left: Berger at Imola before his unhappy race (LA).



says. "It's still the same. OK, we lost our big chief and that's sad, but the atmosphere in the team is the same."

The years at Scuderia Ferrari have elevated Gerhard to true international superstar status. Two of the benefits of driving for Ferrari are his road car, a Ferrari 328, and a lucrative contract from Marlboro. He was born in Wörgl (near Innsbruck) Austria on August 27th, 1959. He still enjoys going home where he can ski (his original passion for speed) and look after his trucking business. But the trips home are not as frequent as he would like.

"I have 40 trucks but I don't work a lot anymore," Berger says of his business. "You have to relax to be strong for the next race. Now I have moved to Monte Carlo so I will not be at home enough. My father looks after the business now." To keep in shape for the physical demands of driving a Formula One car Berger works with fitness guru Willi Dungl. "He has a lot of experience because he spent a long time with Niki Lauda," Berger says of Dungl, "so he has the right background for this business."

Berger is now in his fifth full-time year of

this business. Not since 1986 has he had to deal with qualifying races. The return of Pirelli to Formula One this season after a two-year absence means that both they and Goodyear are supplying drivers with the soft short-lived qualifying tires.

Is Berger happy that qualifiers are back? "No," he says emphatically. "I'm not happy because it's more risk and more dangerous."

One of the most intriguing aspects of the 1989 season is Ferrari's new semi-automatic seven-speed gearbox. The drivers use the clutch to start the car and after that they change gears by moving levers behind the steering wheel. Left for down shifts, right for up.

Is it hard to get used to driving a Formula 1 car fitted with the semi-automatic gearbox? "No, it's not difficult and it's nice to drive," says Berger who clearly doesn't want to discuss the system. Later in the weekend designer John Barnard politely declined to give any details of the system, saying that he wants the other teams to figure it out for themselves.

An amusing anecdote concerns the first

time the system was demonstrated to Nigel Mansell. Sitting in the car with the rear wheels jacked off the ground, Nigel noticed that they were turning the wrong way. All it took to fix the problem was to switch a couple of wires.

Barnard and Berger have formed a solid working relationship. Barnard has worked with the best drivers such as Alain Prost and Niki Lauda, and he rates Berger highly. "We get along very well. Barnard says they are much the same: these top guys. They are always thinking of the car."

Speaking of relationships, what about the relationship between Berger and his new teammate Nigel Mansell? The two have known each other since Berger's Formula 3 days. "I have no problems with him," Berger said last season after Mansell signed with Ferrari. "We will work well together."

Now that they actually are working together, what does Berger plan to do to keep the relationship from deteriorating? "I think we have nothing specific to do. We just have to drive and I don't think we will get any problems." Does Berger see any particular area where Mansell might be stronger than him? "I didn't find out yet," he says. "I haven't had enough experience. (With Mansell) but he's very quick."

Mansell proved the fact by winning the Brazilian Grand Prix later that weekend. Berger and Senna, meanwhile, collided in the first turn on the first lap. Berger parked his Ferrari on the back straight and walked to the pits. Later he was spotted as saying, "Senna chopped across twice to try to make me back off, but he shouldn't try that with me. Never in my life will I back off in that situation."

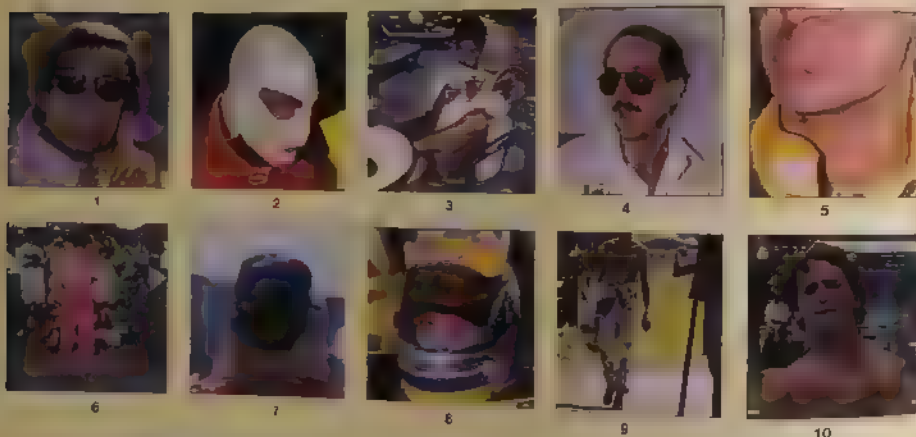
So the 1989 Brazilian Grand Prix ended within minutes for Berger. But the new Formula One era is just beginning. Says Berger, "We are ready to start a new and successful period in the history of the Scuderia. My only regret is that Mr. Ferrari will not be there to see it."



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The four month break from Adelaide 88 to Rio '89 was the longest I had been out of a racing car since my career began in earnest — and boy, was I glad to be back. What a marvellous way to start the new non-turbo era, too: six cars within 18 seconds at the end of the race, and four Brits in the top seven — including yours truly Rio, for me, proved two things in particular: we're going to have motor racing the general public can respond to, and Derek Warwick can be a Grand Prix winner in 1989.

I joined USF&G Arrows two years ago along with Eddie Cheever, designer Ross Brawn and, really, a whole new package. It's taken time, but we've gradually turned it around now, into the package you see in 1989: not the ultimate — we still need a major engine manufacturer behind us, as far as I'm concerned — but we're more on a par now than we've ever been before. Last year we scored 17 points with a two-year-old car design and a 10-year-old engine; we have a designer in the top five, a sponsor among the best in Formula One, and prospects second to none. We finished fourth in the World Championship last year, Arrows almost doubling their previous best-ever total. I consider last year as one where I put myself back on the map as a serious driver. Fitter, feeling younger, because I'm more relaxed now than I ever felt, relaxed, but hungry. I want to win: for sure I have the ability to win, but I'm only just now getting myself into a good position to win. With Arrows this year, we thought we'd consistently finish in the top six and aim for the rostrum. Well, since Rio, I think we're able to race for first place and finish regularly on the rostrum. Mind you, when that race was over I had



**Derek Warwick**  
**Interview**

a chance of catching the 16:30 BA flight to London which would allow me to go and watch my brother Paul in his first Formula Three race. Arrows manager Jackie Oliver and I ran for the helicopter and made the plane with something like 15 minutes to go... I actually got to the check-in desk in my overalls. I had a



non-changeable ticket, but flustered the lady so much she just threw me on to the plane. At passport control I was stopped by two policemen who wouldn't let me through because I had my overalls tied round my waist, still dripping with sweat, with no shirt on. But when they saw who I was they let me past, they thought it was great! I had a quick wash in the men's room, got on the plane, and

it was quite nice to get up to London at 07:30 the following day.

My father was waiting for me and we drove straight down to Thruxton. It's very important for me to go to as many races as I can with Paul, because I feel part of his growing up — I feel like I'm going through my teenage years again. He gives me immense pleasure instead of the younger brother having the older brother as the hero. It's almost the other way around. He is a racing driver that's a bit special, that's going to be as good as the best we have or had, I'm just hope fully steering him in the right direction. He's a lucky bugger, really: he's looked at all my bad points and said, "No, I don't want them", looked at all my good points and absorbed them, and developed his own. I've got parts of other drivers in me that I've looked at, liked and absorbed, and he's done the same — bits of Senna, bits of Villeneuve, bits of DelBoy — though he rarely admits it! For me watching Paul is a release valve, if you like, but also a part of life's pleasures. I had three meetings in London recently, not for me, for Paul. I enjoy that side of it because I can sell Paul Warwick, first of all I can get in there, because I'm Derek Warwick, then I can tell them how good Paul Warwick is!

Looking at Formula One in general, there was one other consequence of the opening race in Rio I feel very strongly about — Philippe Streiff's appalling accident. I've always said, if I'm going to have an accident, I hope it's at Brands Hatch or Silverstone, and the way Philippe was handled is the reason. Apparently from the time he had his accident to the time he was on the operating table was 10 or 11 hours: that's ridiculous. We as a Formula One body can not allow that





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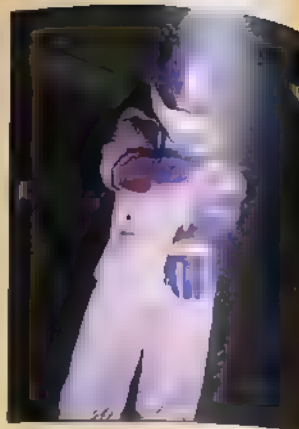
Setting up the settings in Brazil

Spinning Partners



That thing went through hell, you know he shouldn't be alive, and just thank God he is. Philippe is a devoted racing driver. He gives 110 per cent off and on the circuit. He hasn't got a lot of enemies, but not a lot of friends either because of his single-mindedness, he's very difficult to get to know, unlike a lot of other drivers, but we all have our different ways of giving our all. Philippe works hard with the sponsors trying to put deals together, he works hard with the team keeping them together, the guy gives 110 per cent — and probably that 110 per cent created the accident, nobody knows. But for that to happen in modern day racing.

I think everybody thought we had the best facilities around, but what we did, of course, was we took it for granted, rather than go up to people and say to them: "OK, what if there is an accident, a driver is paralysed or hurts his back — what do you do?" I had an accident last year in Canada, where the safety facilities are second to none. I was taken out of that car like a baby, but even then, when I came to rest, I hurt badly, I was sick inside, I couldn't move, I was semi-unconscious — and I came around with



Wrap up safety — it's not easy, it's not

this fire marshal wearing asbestos gloves trying to take my helmet off. Almost ripping my head off. Next thing

it's unacceptable. In modern days, and drivers have got to start making themselves heard again. I feel it's time to revive the Grand Prix Drivers' Association, and some of us have been talking about it already.

The problem with the GPDA is that at the start of the Eighties the body lost a lot of its strength by going out on strike in South Africa. It was bloody stupid to do that, we were getting really strong then, we had the right format, we were doing the right thing — then we go and act like kids. It is time to revive the GPDA, but we have to do it differently. In Formula One everybody does so much testing, so much racing, so much PR that we can't devote the time to the matters of GPDA — it's a 24-hour job otherwise. I think it's time to employ somebody full-time to look after our interests; someone that people respect and will listen to, such as Marc Surer, who has already made moves in that direction.

But I think Philippe's accident, if you like, is a warning shot, and if we don't take notice, there are going to be deaths. Not to say his own accident is not severe: it's a disaster for Philippe and his family, but everyone has their fingers crossed he's going to get over it. Driver safety, as far as monocoque/chassis are concerned, is second to none. We could still go better, but Philippe's accident was very particular. What my designer said was, "You could have built a tank and it would not have withstood those forces, that sort of speed, those forces would have ripped anything open."



Nothing was left of the monocoque chassis



Tough luck



very very tired. I had blood on both elbows, both knees, and I lost the nails on three toes because I'm pushing my feet into very small boots now to give

myself more room in the cockpit. The car is very uncomfortable, and that shouldn't be. I do it for pleasure, not for pain! ■

remember was Mansell coming along, pulling the marshal off, undoing the helmet gently so there's a lot of room for improvement. It's an educational process, we need to know what to do when those accidents happen: don't attack the guy with a pickaxe, take him out of there gently.

The important thing is, you need a voice. In former days we had Niki Lauda, now Niki Lauda could go into a meeting with Jean-Marie Balestre, Bernie Ecclestone or the Lord Mayor of London and get a hearing. Derek Warwick going into those meetings doesn't really get the same attention, we need one of the top drivers to represent us. For me that man is Alain Prost. Prost commands respect from drivers, from marshals, from doctors, and from the President. And he's now relaxed enough, the senior statesman, to be able to do the job.

I believe everyone has done a great deal to improve safety, but things are overlooked. What's important is to bring the driver's feet behind the front axle line: in doing so they've just concentrated the driver up. We've now got into an era of 4/6" racing drivers, and that just can't happen: a racing driver is a racing driver because he has the ability, not a jockey's build.

When Jackie Stewart looked at my car at Ricard, he said, "The full potential of this car will never ever be known because the driver will not be able to drive it at eleven tenths. To a certain extent he's right. Eddie in particular was very cramped in the car but racing drivers adapt themselves very quickly. Still, after Rio I was





# SPEED READING

## MONACO GRAND PRIX

Portrait of a Pageant  
Featuring the Photography of  
Michael Hewett

Text by Craig Brown and Len Newman  
Price £19.95 Published by Motor Racing  
Publications Ltd

MONACO GRAND PRIX  
Portrait of a Pageant



each of the 40 races is described chronologically in short photographic essays supplemented by sparse text and descriptive captions. The main characters in the dramas which span the 60 years in question are sharply focused and more than a little of the flavour that is the Grand Prix world's most compelling amaranthism is in evidence.

For the most part the pictures are well chosen, very well reproduced, and in their composition quite excellent, especially some of the black and white pictures — the shot of Elio de Angelis coming up the hill p 152-3, is a good example. But, missed the pageantry of Monaco itself: the wealth, the glamour, the fashion, the posers in pose, and the sheer splendour of the place. I would have liked to see more photographs of the pit areas and the paddock to reflect if nothing else the difficult conditions under which the teams have to work, and the way in which this does not seem to matter.

The text whilst factual does not quite convey the colour and excitement of a pageant and indeed there are instances of the words leaving more questions unanswered than the opposite. In a book of this kind and especially for those of us too young to remember the epic drives of the early days the anecdote and the quote would have added tremendous authority and credibility to the text which in turn would have given the pictures an extra dimension.

The captions are very helpful but I would have preferred a less rigid design style, so that they became a part of the overall story.

All enthusiasts will want this book — in its way it shows so much of what Grand Prix motor racing is really about — especially its heroes. If it is found wanting for the reasons described earlier it is for its omissions rather than its content. It may not be the pageant implied but it certainly is a book.

1933  
Incident and  
Accident



1948  
First Postwar Win  
in France



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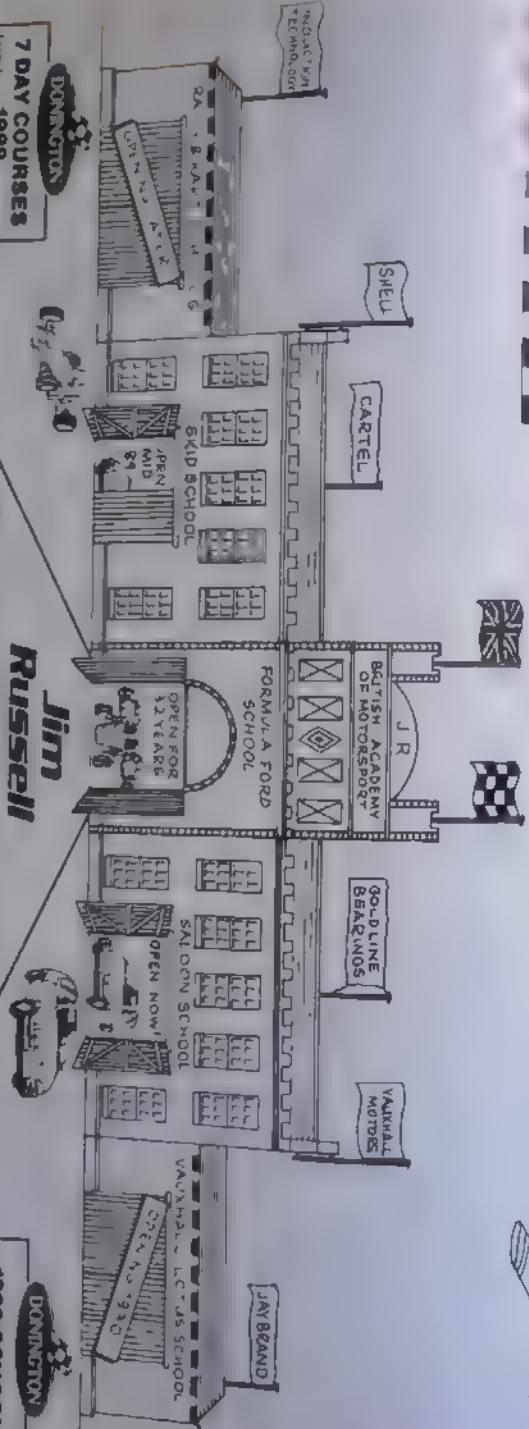


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# PITFALLS

## LIFE ON THE PIT LANE'S LIGHTER SIDE

Accreditation is the bugbear of many journalists' lives, but even in the media jungle you don't expect to have to cope with real lions. Imagine the consternation of those who turned up in the early evening of Thursday, March 23rd at Rio's Inter-Continental Hotel to fetch their race credentials, only to find the car park security men cowering from a lion on the loose. Well, strictly speaking, a lion cub, but why let the facts spoil a good story? They really did not know whether to gather it up and give it the baby treatment, or fetch the grown-up equivalent of a butterfly net. Journalists duly made discreet entry into hotel via side door. Two hours later, papers duly pocketed, some sat quietly savouring the more friendly Brazilian fauna when in strolls... lion cub. In the ensuing panic, one man stood firm: B. Ecclestone appeared as by magic and befriended aforesaid lion cub (the original pussycat) to the extent of actually inserting his finger in the animal's mouth. It was noted that the cub already had the savvy not to return the gesture.



Scary case of brain type

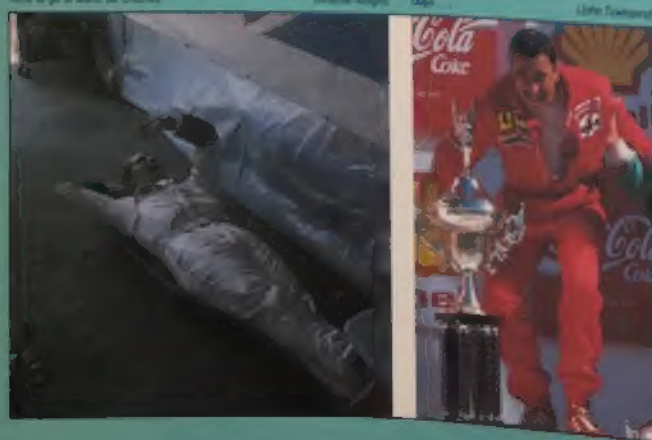
(Airport Nastydust)

Time to go to work, Mr. Cheney

Alonso Knight

Gap

Light Townsend



FISA has a new Press and Public Relations Officer, in the affable and extremely competent shape of Englishman Martin Whitaker. On Monday morning, after MW's baptism by fire in the opening round of the season in Rio, he is standing minding his own business in the Inter-Conti. Unfortunately for our hero, he is minding it beside the pool. Even more unfortunate is the playful presence of a FISA high-up who had better be nameless, along with a Grand Prix driver very definitely named G. Berger. At a loss for something to do, Austrian ace and FISA front man promptly push FISA Press Officer into pool. MW's assistant laughs so hard Herr Berger decides she had better test the waters too. "She'd have been okay if she hadn't laughed."



Downforce problem

(Keith Sutton)

Another one for the records: In Rio, the excellent Riccardo Patrese celebrated his record-breaking 177th Grand Prix start by planting his Williams-Renault on the front row. Now Mr. B. Ecclestone, star of our first vignette, has a soft spot for the Italian who spent many a Sunday afternoon at the wheel of one of Bernie's Brabhams, so a commemorative gift had

rightly been arranged. Cufflinks? A train to add to Riccardo's very high-class collection of models? A gold watch? Something, at any rate, that was easy for an exhausted driver to carry back from far-flung Brazil? A mountain bike. Where the hell do you put a mountain bike on a jumbo jet already crowded with the world's weight in wheel nuts and

widgets? The ever resourceful Canon Williams mechanics, it was believed, had found the answer. Imagine our surprise, then, as we stood at the Varig check-in desk on Monday, when the Canon Williams crews arrived to swell the queue — and with them, all intact, one mountain bike...

Biggie and Bailey — and not an editor in sight

Sporting Pictures



Pitfall of the year? Harassed editor of well-known international Grand Prix magazine is in Rio paddock, boxing the compass in the effort to see all the people and go to all the places he has to get to in the course of a Saturday afternoon. A well-known international photographer bearing an uncanny resemblance to the one known as JT approaches, with friend in tow. The conversation: "Meet our English friend John Brown!" "Hello, how are you, just out for the race?" "Well, no, actually I've been living out here for about 19 years." Still the penny does not drop, though the faintest of alarm bells has begun to ring. "Oh well," adds respect-seeking editor of international publication, "Must dash. Do enjoy the rest of your weekend..." Next day (next day: for Pete's sake), the realisation dawns: the editor of PEI had just been introduced to Ronnie Biggs. ■



# IN THE NEXT ISSUE

First stop Monaco: the July edition of Prix Editions International starts with David Tremayne's report on the most atmospheric Grand Prix of the year, while Maurice Hamilton will be adding his own unique perspective on the race where everyone wants to be seen... even if they're not seen to be doing very much. A special anniversary year for Monaco, too: sixty years since Grand Prix cars first disturbed the peace of the Principality.



"We're supposed to be the best in the world, that's why they give us the hardest circuits", says Derek Warwick about Monaco. His regular Straight Lines column takes us to the sharp end of Formula One: the cockpit, from where the view is different again.



Martin Brundle is back in Grand Prix racing in '89. In an in-depth feature on one of the sport's most popular drivers, Nigel Roebuck finds out how World Champion Brundle is benefiting from the Brabham revival. Mauricio Gugelmin may be Brazilian, but to many the March driver is an honorary Brit: on the eve of the British Grand Prix, "Morris" talks to PEI about a year already transformed by that first-ever rostrum finish in his "real" home race in Rio.

In our background section, Alan Henry turns the spotlight on one of the most talented designers in the game — Adrian Newey, mastermind behind the March cars in which Gugelmin and Ivan Capelli have become regular Formula One front-runners. A truly international motor racing man, Newey has been at the top of the American tree as well: how does Formula One stack up against Indycar racing?



From transatlantic to cross-channel: regular French columnist Johnny Rives of L'Equipe gives us the lowdown on the renamed Larrousse team. Lamborghini, Lola Larrousse: it flows nicely off the tongue, is it all running smoothly on the track?

All this, as they say, and much, much more: as the British round of the World Championship approaches, PEI will pay its own special tribute to one of the greatest British teams to have graced Grand Prix racing. Wait and see...

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